DRAFT

TECHNICAL REPORT
ELECTROCHEMICAL GEOOXIDATION DEMONSTRATION PROJECT
E-1 Area, Kelly Air Force Base
San Antonio, Texas

CONTRACT NUMBER F41624-97-C-8006

PREPARED FOR:

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
Brooks Air Force Base
San Antonio, Texas

PREPARED BY:

MANTECH ENVIRONMENTAL CORPORATION
14290 Sullyfield Circle, Suite 100
Chantilly, Virginia 20151

January 31, 2000

MANTECH ENVIRONMENTAL CORPORATION
A ManTech International Subsidiary

February 2, 2000

Mr. Jerry Hanson
AFCEE/ERT
3207 North Road, Bldg. 532
Brooks AFB, TX 78235-5361

Re: Draft Technical Report
Electrochemical Geooxidation Demonstration Project
Contract No. F41624-97-C-8006

Dear Mr. Hanson:

Enclosed please find 3 copies of the above referenced reports.

ManTech appreciates this opportunity to provide AFCEE with our services. Please call me at (713) 585-7003 if you have any questions or require additional information.

Sincerely,

Douglas D. Carvel, P.E.
Vice President

Enclosures

F:\PROJECTS\5007-KELLY AIR FORCE BASE\REPORTS\FINAL REPORT\5007700-LTRHANSON1.DOC

TABLE OF CONTENTS

1.0 INTRODUCTION 1
- 1.1 Site Background 1
- 1.2 Technology Overview 2
  - 1.2.1 Technical Discussion 2
  - 1.2.2 Technology Development 3
  - 1.2.3 Basic Principles and Theory of ECGO 4
- 1.3 Overview of the Demonstration Study 6

2.0 ECGO DEMONSTRATION STUDY ACTIVITIES 8
- 2.1 ECGO Demonstration Work Plan 8
- 2.2 Monitoring Well Installation 8
- 2.3 ECGO System Design 8
- 2.4 ECGO System Construction 9
- 2.5 ECGO System Startup and Operations 9
- 2.6 Soil and Groundwater Sampling 9
- 2.7 ECGO Equipment Demobilization 10

3.0 SYSTEM PERFORMANCE EVALUATION 11
- 3.1 ECGO System Operations Issues Summary 11
- 3.2 Remediation System Product Generation 11
- 3.3 Climatic Issues 12
- 3.4 Sampling Program Summary 12
  - 3.4.1 Physical Characteristics of Samples 13
  - 3.4.2 Groundwater Analytical Results 13
  - 3.4.3 Soil Analytical Results 14

4.0 CONCLUSIONS AND RECOMMENDATIONS 16
- 4.1 Conclusions 16
- 4.2 Recommendations 17

LIST OF TABLES

Table 1 Groundwater Sampling Analytical Results
Table 2 Soil Sampling Analytical Results

LIST OF FIGURES

Figure 1 Monitoring Well and Soil Sample Location Plan
Figure 2 ECGO System Electrode Configuration

APPENDICES

Appendix A	Site Plans
Appendix B	Hydrology Figures
Appendix C	Boring Logs
Appendix D	Groundwater Sampling Analytical Results Analysis
Appendix E	Soil Sampling Analytical Results Analysis

1.0 INTRODUCTION

ManTech Environmental Corporation (ManTech), has prepared this draft final technical report to document the activities and results of the ElectroChemical GeoOxidation (ECGO) pilot-scale study that has been completed at the E-1 Area, a former waste disposal area for aircraft maintenance operations at Kelly Air Force Base in San Antonio, Texas (the Site). ECGO was implemented to investigate the potential ability of the technology to degrade concentrations of tetrachloroethene, trichloroethene, 1,2-dichloroethene, vinyl chloride, chlorobenzene, benzene, and TPH in soil and as part of a remedial action at the site. ManTech served as a contractor to AFCEE and the work was performed under contract number F41624-97-C-8006.

ManTech is licensed to implement the ECGO remediation technology at U.S. commercial, industrial, and governmental sites. ECGO is an *in-situ* process that applies electrical current to electrodes driven into the ground to address a wide range of both organic and inorganic compounds in unsaturated-zone subsurface soils. ECGO has been used successfully at multiple sites in Europe to remediate soils that have contained a wide range of organic and inorganic constituents, including those compounds at the Site.

This technical report presents the details regarding design, installation, operation, and monitoring of the ECGO system at the Site. The report is divided into four sections: Section 1 presents site and project background information and an overview of the demonstration project; Section 2 presents the details of the completed technical elements of the demonstration project; Section 3 provides a summary and discussion of the soil and groundwater monitoring results used to gauge the effectiveness of the ECGO technology; and Section 4 presents conclusions and recommendations associated with the evaluation of the effectiveness of the ECGO technology as a remedial remedy for soil and groundwater contamination at the Site.

1.1 Site Background

A record review of historic aerial photographs and relevant documents was performed in a recent Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) that was developed by others for Kelly AFB. The RFI was performed to assist in the characterization of the disposal unit, wastes generated, and environmental setting. The information presented in the report summarized below.

- Before to 1943, the Site was wooded and relatively undeveloped as indicated on an aerial photograph dated September 1942. January 1943 aerial photographs (Figure 4-2) indicate initial development of the Site as an open storage area. The Kelly AFB Historic Preservation Plan lists the year of construction of Building 545 in the vicinity as 1943 and lists the building use as a cylinder reclamation facility. A November 1944 aerial photograph (Figure 4-3) provides the earliest photographic evidence of the chemical evaporation pits associated with Building 545 in the E-1 area. Pit dimensions are approximately 100 feet by 150 feet, and the pits appear to be divided roughly in half by a north-south partition.

- An aerial photograph dated July 1951 (Figure 4-4) indicates the presence of a third chemical evaporation pit, north of the first pit (closer to the former Building 545). The pit, roughly triangular in shape, was approximately 100 feet long and 50 feet wide at the widest (south) end. The first chemical evaporation pit is still present in the photo. A Report to Accompany General Master Plan dated February 1952 designates Building 545A as "Cylinder Chrome Plating," providing evidence of the activities associated with the facility.

- According to the Programmatic Environmental Impact Statement (USAF 1997), the chemical evaporation pits were closed in 1955 and filled with gravel and other fill materials. This is supported by an aerial photograph dated October 1959, which indicates an indistinct outline of the most recent pit—the only remaining evidence of the chemical evaporation pits at E-1. A March 1955 blueprint of Building 545 confirmed a change in facility operations, as all the plating equipment had been removed from the floor plan.

- Following cylinder chrome plating, facility operations at Building 545 became a warehouse supply and equipment base, according to the Existing Facility Evaluation Report (from 1970 Master Plan). A December 1972 aerial photograph (Figure 4-5) shows clearing activities and a distinct light-colored area, possibly present during construction of the asphalt parking lot currently overlying Site E-1. The 1984 USAF Real Property Inventory Detail List states the description of Building 545 as "SHP ACFT & ENG DEP" indicating use as a shop, aircraft, and engine depot. In February 1999, Site E-1 was covered by asphalt pavement and used as an equipment storage yard. Specific contaminants likely to have been managed at the Site include metals, VOCs, and SVOCs.

1.2 Technology Overview

This section provides a summary of the development of the ECGO process, a description of the basic principles and theory behind ECGO, summarizes the technical program, and describes the limitations of the technology.

1.2.1 Technical Discussion

ECGO is a patented *in situ* process that uses induced electrical current from electrodes driven into the ground to create oxidation-reduction reactions leading to complete mineralization of organic constituents present in soil and groundwater between (and laterally extending beyond) electrodes. ECGO can remediate contaminants on a continuous basis within a relatively short period, is suitable for urban and developed sites without disruption to site operations, and it eliminates long-term O&M associated with conventional remediation technologies. The ECGO process treats contaminated soil and groundwater *in situ*; therefore, it produces no waste streams that require permitting, treatment, or disposal. The technology can be used for the treatment of contamination in both unsaturated soil and saturated zone (groundwater). Sludges and process wastes containing both inorganic and organic compounds have also been treated using this technology.

The principal advantage of ECGO over other *in situ* technologies, aside from the absence of

secondary waste streams, is the very rapid and complete degradation action the technology produces, regardless of soil type. More conventional technologies such as soil vapor extraction and bioventing require years to produce concentration reductions of 50 to 90%, depend strongly on soil type and the volatility or biodegradability of the contaminant. However, ECGO can produce similar results in 3 to 4 months, the reason for which is explained in the remainder of this section.

Conventional technologies rely on the delivery of a fluid through the soil pore space to increase mass transfer rates; diffusion and desorption in the case of soil vapor extraction and diffusion of oxygen and carbon dioxide for bioventing. These mass transfer operations are inherently slow and increasing them is proportional to the rate at which these fluids (i.e., air, carbon dioxide, oxygen, or the vapor-phase contaminant) can be delivered or extracted. It is well documented that the low permeability of soil and its lack of uniformity (homogeneity) are the impediments to producing a substantial, uniform flow field of these fluids. ECGO does not rely on the delivery of fluids and is virtually immune to mass transfer limitations. ECGO relies on the uniform production of an electrical field, which will be created with an electrode matrix wherever soil moisture is present. The electric field, uniform even in the tightest, most impermeable portions of a stratified lithology, generates oxidants from soil moisture right at soil particle surfaces, where soil moisture and contaminants reside. The oxidants, produced at the soil interface, react with and mineralize the local organic contaminants. Although simple in concept, the theory is much more complex, and, indeed, the execution of the process as well. The theory is explained in more detail below but the details of the execution (i.e., probe placement and operating parameters) is proprietary and cannot be provided herein.

1.2.2 Technology Development

In 1985, P+P Geotechnik (P+P) began research on the electrochemical removal of inorganic pollutants and, in 1991, on the electrochemical mineralization of organic pollutants. There are two distinct sets of basic principles involved when using electrical current to treat inorganic and organic contaminants.

The first set of principles are electrokinetic processes. This includes electroosmosis, electrolysis, and electrophoresis, and entails the migration, enrichment, and/or precipitation of mobile heavy metal ions, complex ions, and metal colloids in an electrical field between countercharged electrodes. There are various users and patent holders of techniques that involve electrokinetic processes. [(2)] Research continues and there is a substantial body of literature building.

The second set of principles is based on oxidation/reduction reactions which are induced and destroy organic pollutants *in situ*. In these reactions, pollutants are mineralized into carbon dioxide and water without moving them. The technology is known in Germany as Geooxidation, and is being introduced in the U.S. as Electrochemical Geooxidation (ECGO) by ManTech Environmental Corporation. European and U.S. patents are pending. [(3)]

Since its development in 1991, P+P has reported successfully completed remediation at more than 25 sites in Germany, treating more than 2 million metric tons of soil. At nearly all of these sites, remedial objectives for soil were reported to have been reached in less than 90 days.

1.2.3 Basic Principles and Theory of ECGO

When treating organics, ECGO induces the polarization of naturally-occurring iron, magnesium, titanium, and elemental carbon surfaces in soil and rock particles. Naturally-occurring heavy metal impurities act as catalysts for the Redox reactions creating numerous microscopic anodic and cathodic, oxidative and reactive, reaction sites. Organics that are amenable to anodic mineralization degrade locally by taking an oxidative route: petroleum hydrocarbons degrade to alcohols, then to aldehydes and oxalic acids, and finally to carbon dioxide and water. Organic constituents that are amenable to cathodic mineralization degrade by taking the reductive route: chlorinated organics are reductively dehalogenated.

The remainder of this section describes in more detail the theory regarding the important elements of the ECGO process: (1) the catalytic role of soil; (2) the behavior of soil moisture and the microscopic role of electricity; and (3) the ECGO reaction sequences.

Catalysis by Soil Minerals

For the application of ECGO, soil is considered as comprising secondary minerals originating from the weathering of solid rock and the minerals which comprise rock. The chemical composition of minerals will change during weathering. Compared to the average in the lithosphere observed by Clarke, Vinogradov has observed in soils near the surface an increase in elements such as O, Si, Ti, S, C, V, As, Mo, I, and Cd, but a decrease of elements like Al, Na, K, Mg, Mn, and F. [5]

Minerals contain impurities (from nearly the whole range of chemical elements) within a compound structure. [6] Elements such as Al, Mg, Fe, Ti, Cu, Mn, Zn, Rb, V, Ni, Co, Mo, Pt and Au appear in trace amounts ranging from 30 to 4,600 ppm. These elements and their compounds are also known catalysts. Because the soil provides almost all known catalysts and reactants, this explains in general why ECGO uses very little power. The catalysts substantially reduce the activating energy required to start and maintain chemical reactions. [7]

The Quasi-Colloidal Model of Soils

Most soils contain water; capillary water and captive water. ECGO can be applied with a soil moisture content as low as 6%. Contrary to standard definitions used in chemistry, the water in soils contains electrolytes that induce ionic conductivity.

In soils, media with different chemical and physical properties are in contact -- soil particles with other soil particles and/or with pollutants. Contact electricity produces electrical charges at the interface, which tend to compensate each other and the system is therefore neutral at the interface.

Where soil particles and pollutants are in contact with water, contact electricity creates opposing charges. Generally, water, with a high dielectric constant, has a positive charge, and the soil/pollutant particle will have a negative charge. Surrounding this is a tightly bound cationic layer, and surrounding it is a more diffuse layer with a greater concentration of cations than anions. The

outer layer is adjacent to the bulk solution (capillary water), where cations and anions are present in equal concentrations.

This double layer structure is approximately 0.1 to 0.15 mm thick. Electrostatic forces such as Van der Waal, London and Coulomb forces attract it to the surface of the soil particle. Between the surface of the soil particle and the outer boundary of the hydrate hull there is a voltage gradient known as the Nernst Potential. This gradient between the inner hull and the bulk solution is the Zeta or Electrokinetic Potential.

Hydrology defines the layers by suction strength. The inner hull is bound to a solid or liquid surface by 15,000 - 25,000 Bar (164,000 - 362,500 psi), but when captive water becomes available to plants the outer limit of this system is a pressure of 15 Bar (220 psi). Clearly these definitions contradict each other to a certain extent. [8]

Looking beyond hydrology to the Nernst and Stern colloidal model, we do find similar principles. Recalling the significance of moisture (in the soil or as groundwater), a different model of soil can be considered for purposes of describing ECGO: namely, as a quasi-colloidal system governed by the laws of aquatic chemistry. [9]

The Reactive System of Geooxidation

Electrochemical reactions can occur only in materials having electrical conductivity. Because soil particles, and to some extent pollutants, are defined here as having colloidal properties, they must be considered conductors as well. When a direct current of defined voltage and intensity is applied to the soil, energy is supplied to the aquatic system, inducing redox reactions at the interfaces.

Among the reactions which take place is water electrolysis. The water in soils dissociates to O_2, H_2, OH^-, and H^+ ions. In subsequent ion and radical reactions, their reactive products are O, H, OH^- radicals, and hydrogen peroxide. [11] In oxidation and reduction sequences supported by catalysts, these agents can convert pollutants to alcohols, then to aldehydes and organic acids, and then to CO_2 and water. The decomposition of large molecules (e.g., PAH, aliphatic hydrocarbons) occurs in stages, along with the progressive dehalogenation of organic compounds.

Conversion Sequences Related to Organic Pollutants

To verify our field results against the standard literature, soil and groundwater samples collected from previous remediation sites have been analyzed. The observations below have been made from these data.

- The long molecules in aliphatic hydrocarbons break at preferred points -- *e.g.,* C_{36} reduced to C_{12} or C_6 and probably C_3. Thereafter, the hydrocarbons are oxidized in stages to alcohols, aldehydes, carboxylic acids, and finally to CO_2 and water. Aromatics such as toluene are first oxidized to benzyl alcohol, benzaldehyde, benzoic acid, and then CO_2 and water. PAHs are reduced in stages to naphthalene and monoaromatics, which are then progressively oxidized.

- Chlorinated hydrocarbons are dehalogenated in steps. For example, pentachlorophenol is progressively reduced to phenol, and then oxidized further.

- Cyanides and other nitrogen-containing compounds are hydrolyzed to acetic acid, and then oxidized to CO_2 and water. In addition, the chromatograms reveal another sequence of oxidizing cyanides and nitro- compounds to azo- and perhaps triazo- compounds. [14]

1.3 Overview of the Demonstration Study

ManTech implemented a pilot-scale study of the ECGO technology to demonstrate the effectiveness of ECGO to remediate soil and groundwater containing volatile and semivolatile organic constituents at the E-1 Area Site. The technical approach consisted of applying ECGO within a defined study area for a treatment period of 150 days to treat the target organic contaminants (tetrachloroethene, trichloroethene, 1,2-dichloroethene, vinyl chloride, chlorobenzene and benzene). The effectiveness of the demonstration study was evaluated by examination of the concentrations of target organic compound constituent concentrations and total petroleum hydrocarbons (TPH) at the end of the treatment period relative to the concentrations at the beginning of the treatment period. In addition, the detection and quantification of degradation products of the target organic compounds also have been examined to determine if system configuration and operating parameters were optimal.

The demonstration study for treatment of the Target Compounds, tetrachloroethene, trichloroethene, 1,2-dichloroethene, vinyl chloride, chlorobenzene, and benzene, consisted of the installation of an array of twelve electrodes connected to an above-ground ECGO power plant that was operated for a period of 150 days. ManTech sampled groundwater from six monitoring well locations within or near the treatment area and soil samples from six boring locations near these monitoring wells. Five monitoring wells were installed and sampled, and one existing well was sampled by ManTech personnel prior to design and installation of the ECGO system. Next, a geophysical survey was completed to determine the conductivity of site soils. The detailed engineering design and construction of the ECGO system was completed by ManTech with assistance from P+P Geotechnologies. Construction of the ECGO system included installation of twelve steel-plate electrodes by pile-driving methods, mobilization of the power plant, installation of wiring between the electrodes and the power plant, and wiring of the power supply to the power plant. Monitoring of the ECGO system during the 150-day operational period will be conducted by a electrical subcontractor retained by ManTech.

Groundwater sampling from the six monitoring wells, and soil sampling from six soil boring locations was completed prior to system startup, after about 50 days, after about 100 days of operation of the ECGO system, and at the completion of the treatment period (150 days of operation). One additional round of post treatment soil and water sampling was conducted approximately 150 days after the final operational samples were collected. Comparison of these sampling results and other site specific climatic factors has provided ManTech, AFCEE, and Kelly AFB personnel the opportunity to evaluate the overall effectiveness of the ECGO technology. The interim sampling data was used by ManTech personnel to monitor system progress and to avail

ManTech the opportunity to optimize the performance of the ECGO system. All soil and groundwater samples were analyzed for TPH and volatile organic compounds (VOC) using Chemron, Inc., an AFCEE-approved laboratory.

2.0 ECGO DEMONSTRATION STUDY ACTIVITIES

This section describes the technical elements of the ECGO demonstration study that were completed at the Site for remediation of soil and groundwater. Each of the technical elements completed are described separately below.

2.1 ECGO Demonstration Work Plan

ManTech prepared a draft Work Plan Report detailing the technical elements of the ECGO Demonstration Project at the Site. The report was submitted to AFCEE on April 25, 1997. The Work Plan included: details regarding the design, installation, and operation of the ECGO system; a Sampling and Analysis Plan describing the installation of additional monitoring wells and sampling and analyses of groundwater to verify the effectiveness of the ECGO treatment; a Waste Management Plan; a Quality Assurance Plan; a Site Health and Safety Plan; and a project schedule.

2.2 Monitoring Well Installation

Six additional monitoring wells (MW-119, MW-120, MW-121, MW-122, MW-123 and MW-124) were installed, five within and one down-gradient of the treatment area, in order to provide an adequate number of locations within and near the treatment area to sample groundwater before, during, and after treatment by the ECGO system. The monitoring wells were installed by J.E.D.I., a subcontractor to ManTech at the locations shown on Figure 1, Appendix A. These well locations were selected to better define the extent/distribution of the affected groundwater and soils within the treatment area and to provide rational locations for system progress monitoring. This progress monitoring to include groundwater analysis and geoprobe soil sampling and laboratory analyses.

The monitoring wells were installed using the specification prepared by ManTech and provided in the Work Plan. The wells are 2-inch diameter, constructed of PVC well screen and casing, and extend to approximately 30 feet below grade. They were installed using hollow-stem auger drilling techniques and the drilling was supervised and logged by a ManTech geologist. Boring logs for these well installations and well reports are provided in Appendix C.

2.3 ECGO System Design

ManTech, in conjunction with P+P Geotechnologies, the inventor and patent holder of the ECGO process, completed the design of the ECGO system for implementation at the Site. The design included the depth, spacing, and wiring configuration of the ECGO electrodes, and developing site-specific operating parameters (voltage and amperage) to be applied to each pair of electrodes.

The final design of the ECGO system included 12, z-shaped, sheet-pile electrodes installed to a depth of approximately 30 feet below grade. The electrodes were provided DC voltage by ECGO power plants housed in one on-site trailer. The power plants were provided electrical service by two, 100-amp circuits of 480 VAC, 3-phase power installed by the base. The locations of the electrodes and

the definition of the treatment area are shown on Figure 2 in Appendix A. The electrodes were connected to the power plants by wiring installed by a subcontractor to ManTech.

2.4 ECGO System Construction

Construction of the ECGO system began on January 13, 1998, with the installation of the 10 sheet pile electrodes. The electrodes were installed by Boston Towing & Transportation, Inc., a subcontractor to ManTech. The electrodes, installed by vibratory hammer techniques, were completed flush to the ground surface.

The above-grade wiring of the electrodes was completed the week of Jan 16, 1997. The wiring, #6 insulated welders cable, was placed directly on the ground surface for the electrodes within the fenced portion of the treatment area.

The trailer containing the ECGO power plants was mobilized to the Site during the week of Jan 13, 1998. The power plants were attached to the electrode wiring by a ManTech electrician. The ECGO power plants were hard-wired to the two, 100-amp circuits of 480 VAC, 3-phase electrical power by Kelly AFB representatives.

2.5 ECGO System Startup and Operations

The startup of the ECGO system was completed by representatives of ManTech and P+P Geotechnologies on January 20 through 24, 1998. The ECGO system operation was engaged by the gradual application of voltage to each electrode pair until a current of about 40 amps was detected by power plant instrumentation between electrode pairs. During the startup, ManTech observed no inconsistent voltage and amperage and normal soil resistivity.

After startup, the system was monitored daily to record voltage and current at each electrode pair and the ECGO system operated within normal parameters.

The daily monitoring was performed by Texas Machine Tool Maintenance, under contract to ManTech. The electrician followed a monitoring specification prepared by ManTech and competed daily monitoring log sheets that were faxed to ManTech for review. Based on these readings, adjustments to the system operating modes were made.

2.6 Soil and Groundwater Sampling

Evaluation of the effectiveness of the ECGO technology was accomplished by sampling and analyses of soil samples collected within the treatment area and groundwater samples collected from monitoring wells located within and just outside the treatment area. The sample locations are shown on Figure 3, Appendix A. These samples were analyzed for Target Compounds and their degradation products, gasoline (GRO) and diesel range organics (DRO), and volatile organic compounds (VOCs).

A total of six wells were sampled during the performance of the project: MW-007, MW-119, MW-120, MW-121, MW-122, MW-124. All of the wells were sampled in December, 1997, just prior to startup of the ECGO system and two subsequent times during operations of the system in April and July of 1990, after about 75 and 150 days of ECGO system operation. In September of 1998 and May 1999, all six-wells and soils were sampled subsequent to discontinuance of system operations and a flood event. The final monitoring, in May 1999 also included eight additional soil sampling locations. The results of the groundwater and soil sampling and analyses are discussed in Section 3.0 of this report.

2.7 ECGO Equipment Demobilization

Upon completion of ECGO system operation and the initial post-treatment monitoring event, ManTech removed and demobilized the above-ground equipment associated with the ECGO system from the Site. The electrical leads from the electrodes and the power plants were disconnected, rolled, and transferred to the trailers. The trailers that contained the leads and the ECGO power plants were loaded onto a flatbed transport vehicle and removed from the Site on April 3, 1999. Removal of the temporary fencing and sheet-pile electrodes were outside ManTech's scope of work.

3.0 SYSTEM PERFORMANCE EVALUATION

The criteria used to evaluate the ECGO technology performance for the treatment of chlorinated solvents and petroleum-related hydrocarbons in soil and groundwater at the Site are presented below.

1. ECGO System Operations issues;
2. Remediation system product generation;
3. Climatic conditions that effect system performance or contaminant behavior;
4. Physical characteristics of soils and groundwater during sampling events; and
5. Sampling program for periodic measurements of target analyte and degradation or daughter product concentration.

This section of the technical report provides a summary of these evaluation criteria that were reviewed for the treatment Site and discusses the potential influence of the criteria on the success of the demonstration project.

3.1 ECGO System Operations Issues Summary

Periodic system adjustments were made by a ManTech subcontractor, to ensure that the design amperage of 40 amps were maintained in each of the ECGO system circuits. The system either maintained the appropriate amperage or required only minor adjustments and hydration during the course of the system operations. No loss in power to any circuit was observed and no replacement of contacts or equipment was performed during system operations.

The system appears to have operated as designed and no negative influence from system disruptions were observed to impact the effectiveness of the system (i.e., power outages or interruptions).

3.2 Remediation System Product Generation

When a direct current of defined voltage and intensity is applied to the soil, energy is supplied to the aquatic system, inducing redox reactions at the interfaces. Among the reactions which take place is water electrolysis. The water in soils dissociates to O_2, H_2, OH^-, and H^+ ions. In subsequent ion and radical reactions, their reactive products are O, H, OH^- radicals, and hydrogen peroxide. [11] In oxidation and reduction sequences supported by catalysis, these agents can convert pollutants to alcohols, then to aldehydes and organic acids, and then to CO_2 and water.

These reactive products of system operations and the resultant remediation product CO_2 can be monitored to determine and confirm their existence and relative generation rates during the operation of the system. Due to the consistency of the system operations and water consumption throughout the period of performance, in *situ* gas monitoring for these products were not performed.

In the event that these products had been monitored, demonstrating the effective generation of the reactive products and related increases in CO_2, would have provided interim confirmation of the

successful operation of the technology at the Site.

3.3 Climatic Issues

Weather system changes and normal rainfall events are not a problem for the ECGO technology nor the contaminant distribution unless the water volume shorts the system or causes redistribution of the contaminants. The ECGO system is adjusted frequently to compensate for changes in electrical conductivity variations associated with climatic changes at the treatment Site.

Climatic conditions did not appear to affect the treatment system operations. However, a plot of the monthly rainfall at the Site, Appendix B, identified a major rainfall event that occurred at the Site in August 1998. Confirmation of this event was made by Kelly AFB personnel that confirmed that a flood event in excess of a 100-year flood had occurred at the Site, that the entire treatment area had been under water, and that the contaminated soils in the area were totally submerged.

It is likely that the August 1998 flood event affect the distribution of contamination throughout the treatment area and the migration of contamination throughout the entire soil column. The horizontal and vertical redistribution of contaminants throughout the treatment Site, could have invalidated all previous periodic sampling results. This is due to the strong possibility that concentrated areas of unidentified LNAPL and DNAPL within and outside of the treatment area would have redistributed and equilibrated across the saturated Site. In addition, as the flood waters and groundwater would have returned to normal levels, these impacted waters would have transported the newly dissolved contaminants throughout the soil matrix and into the underlying groundwater

3.4 Sampling Program Summary

Baseline samples, periodic progress samples, final and post final samples were collected at the Site from December 1997 to May 1999. Samples from each of the six monitoring wells, shown on Figure 2, and from each of the six soil boring locations near each well were sampled at various depths during each sampling event. During the post final sampling event, samples were collected from various depths at an additional eight soil boring locations within the treatment area. The sampling locations are shown on Figure 3. The wells included in the monitoring program, their location relative to the treatment area, and the months that they were sampled are listed below. All samples were analyzed for VOCs by USEPA Method 8260, GRO by USEPA Method 8015, and DRO by USEPA Method. The sampling was performed by ManTech personnel. Analyses were performed by Chemron Incorporated analytical laboratory in San Antonio, Texas. Soil samples also are identified by the depth to which the samples were obtained. The periodic soil samples were obtained from borings that were advanced within one foot of the previous samples.

The laboratory results for the analyses of the periodic groundwater and soil samples collected as part of the ECGO demonstration program are included in Appendices D and E, respectively. These include the target analytes that were the focus of the demonstration project, namely, tetrachloroethene, trichloroethene, 1,2-dichloroethene, vinyl chloride, and GRO and DRO.

3.4.1 Physical Characteristics of Samples

Groundwater and soil samples were observed for distinct traits in lithology, color or odor during the well installation and periodic soil sample collection process. No variations in lithology or observed visual traits or NAPL were noted by the ManTech field personnel in groundwater samples obtained during any sampling event at the Site. ManTech field personnel did note distinct discoloration and solvent odors in soil samples that were collected during the baseline and initial progress sampling event. These observed characteristics were supported by elevated OVM field readings of the soil column and the subsequent laboratory analyses of the samples. During the subsequent progress soil sampling event and final sampling event, the visual discoloration and solvent odor were not present.

3.4.2 Groundwater Analytical Results

Groundwater samples were collected by ManTech from five monitoring wells within the ECGO treatment area, MW-007, 119,120,121, and 124, and from the control well outside the treatment area, MW-122, prior to ECGO system startup in December 1997, during system operations in April and July 1998, and subsequent to discontinuance of system operations and after a flood event in September 1998 and May 1999. Groundwater and precipitation data for the Kelly AFB are presented in Appendix B. Due to the dry conditions and minimal recharge of MW 121 during the July and May sampling events, groundwater samples were not collected and analyzed for these well during those sampling events. The detailed analytical results and graphical trend presentations of these sampling events are presented in Appendix D. An evaluation of these analytical results for these analyses is presented below.

- Precipitation and groundwater elevation data confirm seasonal high levels prior to the April and September 1998 sampling events and a seasonal low prior to the July 1998 sampling event.

- Petroleum target analyte analytical results in all wells within the treatment area and MW-122 show a marked increase in GRO and TPH during the April 1998 sampling event with a consistent decrease during the ECGO system operations.

- After the August 1998 flood event, large increases in all petroleum constituents are observed in all wells in the treatment area and in MW-122.

- VOC target analyte and degradation product analytical results in all treatment area wells show an average reduction in all analyte concentrations and an overall average reduction in excess of 90% of total VOCs during the period of operation of the ECGO system. The control well MW-122 showed a relatively constant level of VOC concentrations during this same period.

- After the August 1998 flood event, up to 600% increases in concentrations of individual analytes and total VOCs were observed as compared to the treatment period low concentrations observed in July 1998. These post-flood event VOC concentrations also reflect an increase of approximately 50% above the background levels identified in the December 1997 sampling event.

- Vinyl chloride (VC), a primary degradation product of the target VOC analytes at the Site, concentrations were low and stable during all pre-flood sampling events. Post-flood sampling events in the treatment area wells show dramatic increases in VC concentrations.

3.4.3 Soil Analytical Results

Six soil samples were collected by ManTech from borings within the treatment area and one sample outside the treatment area as a control sample point. Five of the treatment area sampling locations were near the five monitoring wells within the ECGO treatment area, MW-007, 119,120,121, and 124, and from borings near the control well outside the treatment area, MW-122. An additional boring location SB 123 was located in the northwest section of the treatment areas. Samples were collected at each of these seven locations prior to ECGO system startup in December 1997, during system operations in April and July 1998, and subsequent to discontinuance of system operations and after the August 1998 flood event in September 1998 and May 1999. For each sampling event, each of the locations was given a distinct sample identification number. The listing of these sample designations are included in the Soil Analysis Appendix, Appendix D. Additional samples, SB 186 through 192, were collected within the treatment area during the May 1999 sampling event. All soil sample locations are indicated on Figure 3, Appendix A.

Samples were collected during each sampling event at each boring from three horizons. The detailed analytical results and graphical trend presentations of these sampling events are presented in Appendix E. Boring logs from each location are presented in Appendix C. An evaluation of the soil sampling observations and corresponding analytical results are presented below.

- An evaluation of the lithology of the boreholes at the Site identified a consistent shallow clay that grades to a clayey silt or sandy clay to a depth of approximately 20 feet below ground surface. The geology then becomes highly variable throughout the Site. Within the area of MW 124 and 119 and SB 123 resides a highly permeable gravel below the 20 feet bgs levels that grades to a saturated sand at depth. All other locations have a less permeable clayey sand or sandy clay to depth.

- Trends in petroleum analyses results were inconsistent during the course of the treatment at all boring locations. Borings near MWs 120 and 124 within the treatment area and near MW 122 outside the area had low levels to non-detectable concentrations of petroleum hydrocarbons at all horizons. Initial elevated levels of TPH at MW007 in both shallow and deep horizons became non-detectable during and after treatment. Increased concentrations of TPH in the 8-10 horizon and the 28-30 horizon were identified in MW 119.

- VOC analyses in soils in the boring locations near MWs 119, 124, 122, and 007 identified an average 6-fold increase in concentrations of overall target analytes and total VOCs at the 8-10 foot horizon from the baseline sampling event to the initial sampling event in April during the treatment period. This increase was followed in these borings with a subsequent consistent decrease to levels approaching non-detectable concentrations for all remaining sampling events.

These observations were consistent at all horizons.

- VOC analyses in soils near MWs 120 and 121 showed modest levels of low level contaminant concentrations during the treatment period. Analyses identified 100 fold increases in VOC concentrations subsequent to the treatment cycle and flood event at the Site.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The objective of the ECGO demonstration project at the Site was to evaluate the effectiveness of the ECGO technology in reducing concentrations of target volatile organic compounds and petroleum hydrocarbons dissolved in groundwater and adsorbed to both saturated and unsaturated-zone soils. Observations made during the periodic sampling events and confirmed by the analyses of soil and groundwater samples indicated that consistent and significant reductions in concentrations of VOCs in soils occurred during the period of performance of the ECGO system in the treatment area that was followed by a dramatic increase in concentrations of VOCs during post treatment monitoring. These increases in post treatment concentrations occurred subsequent to a flood event that had saturated the area after the ECGO treatment phase had been suspended. Possible non-ECGO causes for these confirmed observations will be addressed in this section and recommendations for confirmation of these possible causes presented. The remainder of this section summarizes our conclusions derived from the groundwater and soil monitoring results, and provides recommendations for further testing to confirm the effectiveness of the ECGO.

4.1 Conclusions

Our conclusions concerning the observations and the effectiveness of the ECGO system for the E-1 Site contamination are summarized below.

- Consistent and significant reductions in VOC concentrations occurred during the period of performance of the ECGO system in the treatment area had to have been caused by the ECGO treatment process or by natural attenuation processes. However, natural attenuation processes normally would not cause these dramatic reductions in this short period of time, and therefore, the ECGO process is the likely cause for these reductions.

- Due to the large reductions in concentrations and the consistency throughout the Site, sampling variability is not believed to be an explanation for the data provided.

- Dramatic decreases in soil and groundwater VOC concentrations during the treatment period with a post-treatment/post-flood elevation of VC concentrations indicate that reductive dechlorination has been occurring. Again, this process could only occur due to anaerobic dechlorination or by the ECGO process.

- Soil sampling for confirmation of treatment processes provides potentially inconsistent and variable results due to the sampling process, sample processing at the laboratory, and the complex nature of the soil types with the variable distribution of the contaminants. Confirmation of the effectiveness of any treatment process should be made by monitoring the soil and groundwater for final products of the treatment process, in addition to target compound analysis. In the case of the ECGO process, monitoring for hydrogen and oxygen and carbon dioxide

should be made. In addition, confirmation that the Site is not a highly naturally reductive environment should be performed.

- No effective determination of mass removal in the treatment area was available during the treatment process, due to the limitations of the intrusive characterization procedures that were used for the variable lithology and distributions of contaminants at the Site.

- Soil samples collected after flooding occurred at the Site were of no value if the soils had become saturated due to the redistribution of NAPL and adsorbed contamination that were located within and outside of the treatment area.

- Groundwater samples collected after the flooding had occurred were only valuable for observing the concentrations of degradation products such as CO2 and VC.

In summary, ManTech believes the effectiveness of the ECGO system in remediation of target analytes within the treatment was not fully determined during this demonstration project because of the ineffective progress sampling and monitoring program that was employed. ManTech has developed recommendations for consideration by AFCEE that could provide a better evaluation of demonstration treatment programs and ECGO in particular. Our recommendations are provided in the following section.

4.2 Recommendations

The results of the demonstration of the ECGO technology for remediation of groundwater at the Kelly AFB E-1 Site are in general encouraging, but in some cases inconclusive. ManTech makes the recommendations below for consideration in further establishing the effectiveness or ineffectiveness of the ECGO process in remediation of the target analytes at the Site.

- Perform a natural attenuation evaluation of the Site including periodic monitoring of reductive products to determine whether natural attenuation could have caused the generation of the massive VC concentrations that were detected at the Site. Due to our involvement with TNRCC in the development of Monitored Natural Attenuation protocols, ManTech can provide the full range of support services to obtain this information. In addition, in the event that natural attenuation is occurring at the Site, ManTech can provide support in developing enhancements such as BioClean to accelerate the processes.

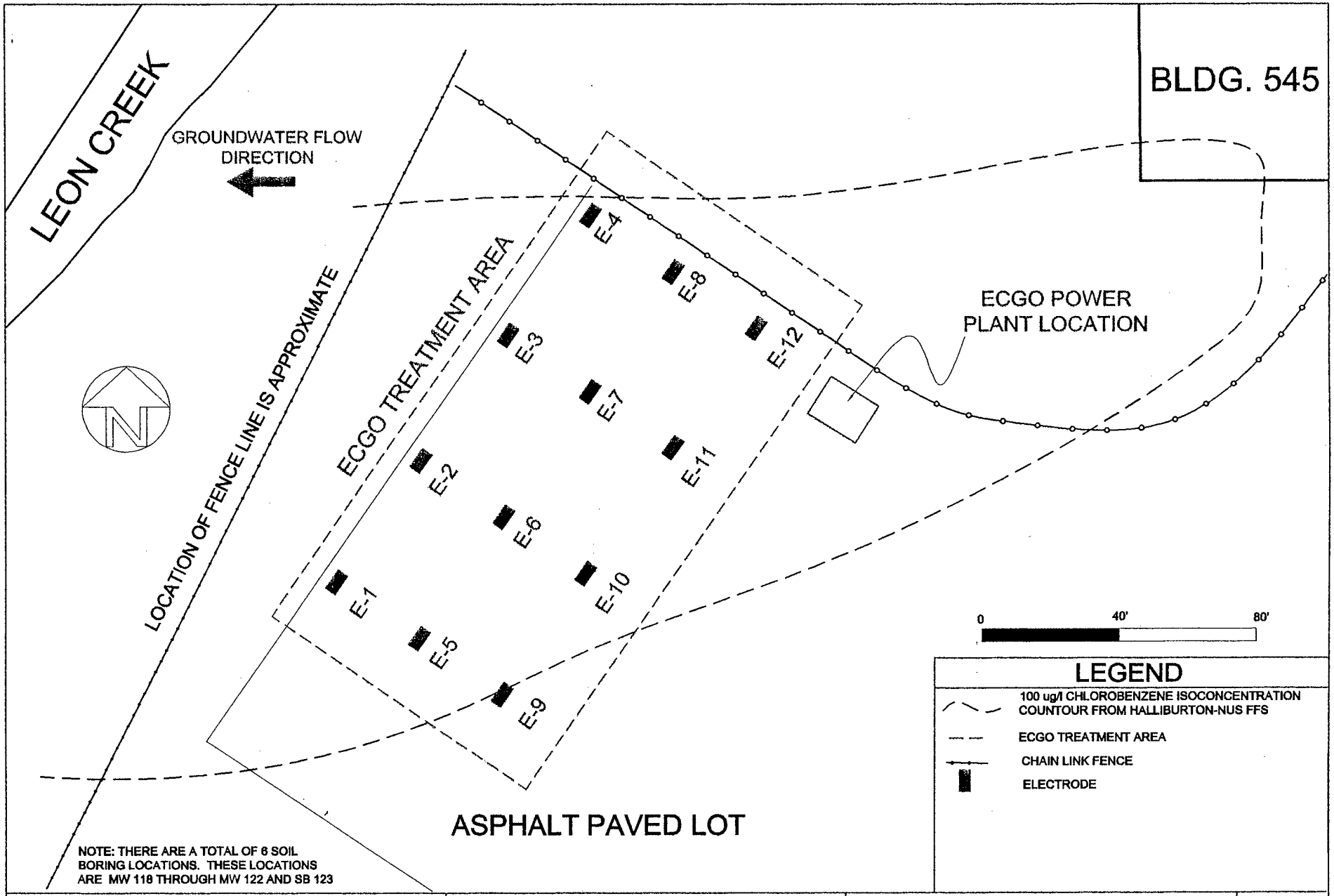
- In the event that a reductive environment does not exist at the Site or if VC production rates do not validate the observed rate of degradation product generation, conduct a further evaluation of the ECGO treatment process using in-situ continuous monitors for the production of treatment process products. ManTech offers to provide the ECGO treatment units at a reduced rental rate to perform this additional demonstration at the Site.

ManTech has appreciated the opportunity to evaluate the effectiveness of the ECGO technology at the Site and continues to believe that the technology with further evaluation will continue to reduce

contaminant concentrations at the Site. However, without the additional data discussed above, the effectiveness of the ECGO system cannot be properly evaluated.

APPENDIX A

SITE PLANS



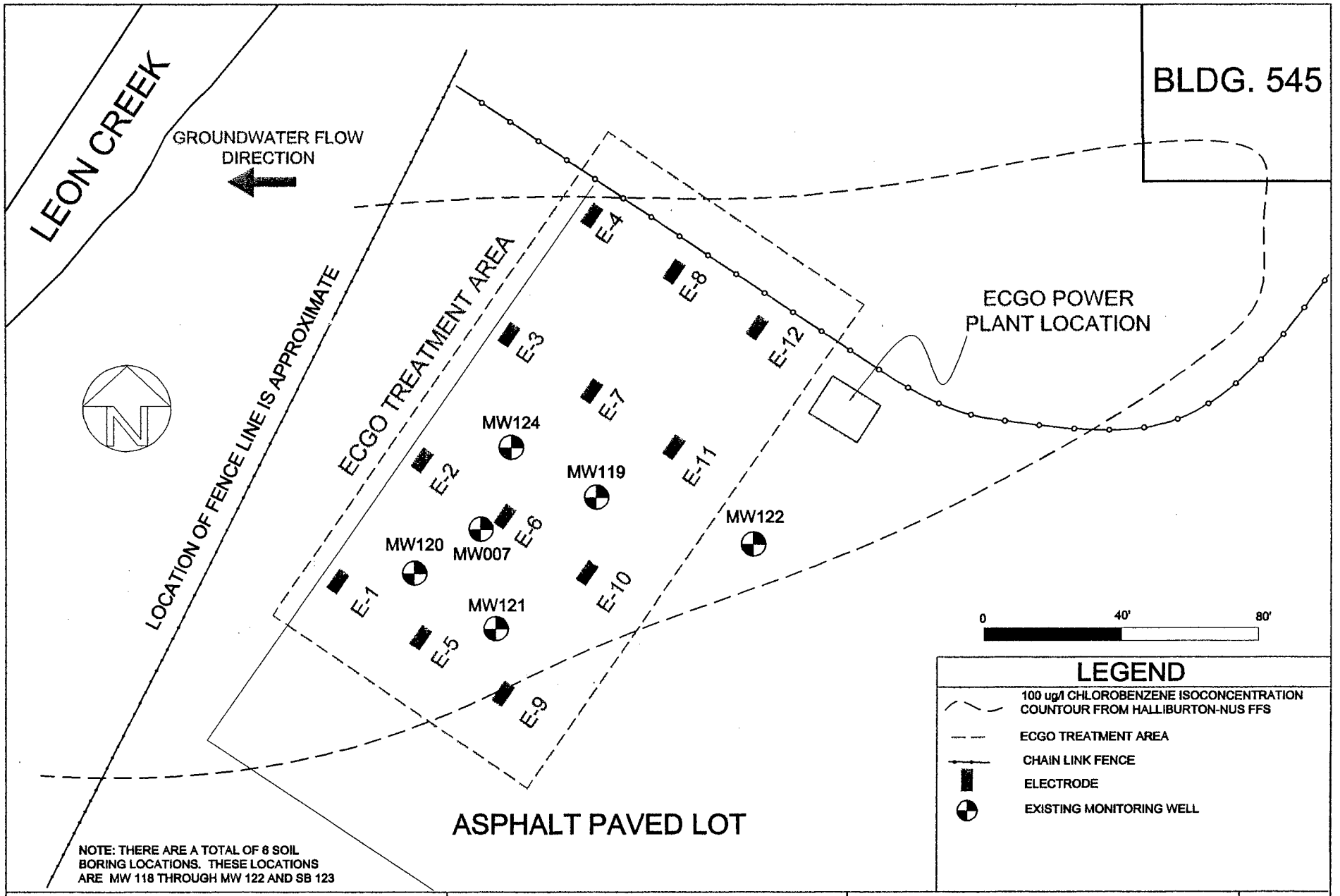
MANTECH ENVIRONMENTAL CORPORATION

MANTECH PROJECT #: 5007-

KELLY AIR FORCE BASE
SAN ANTONIO AIR LOGISTIC CENTER
SANT ANTONIO, TEXAS

ECGO ELECTRODE LAYOUT

FIGURE 1



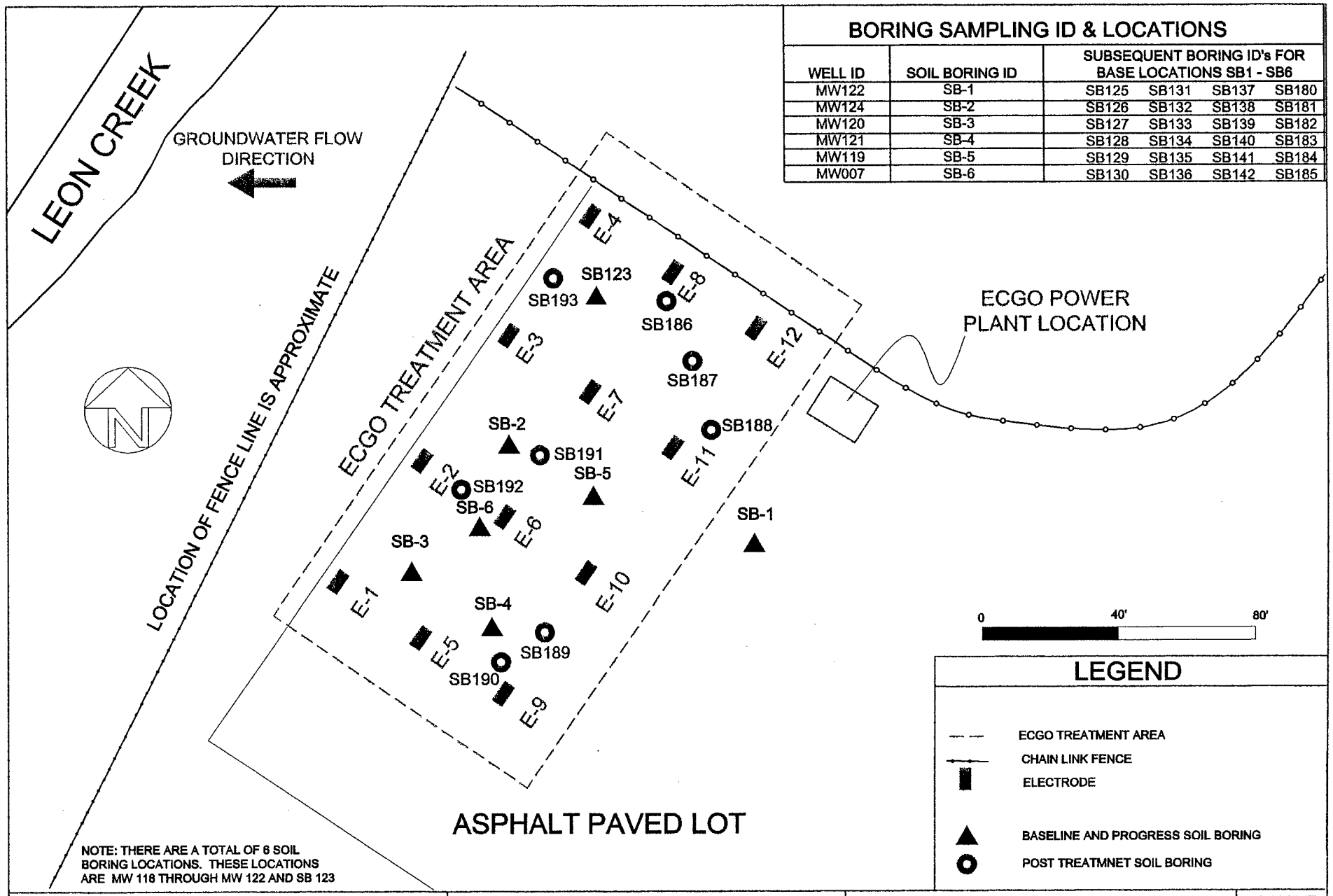
MANTECH ENVIRONMENTAL CORPORATION

MANTECH PROJECT #: 5007-

KELLY AIR FORCE BASE
SAN ANTONIO AIR LOGISTIC CENTER
SANT ANTONIO, TEXAS

AREA E-1
BASELINE SAMPLING EVENT
MONITORING WELL LOCATIONS

FIGURE
2



BORING SAMPLING ID & LOCATIONS

WELL ID	SOIL BORING ID	SUBSEQUENT BORING ID's FOR BASE LOCATIONS SB1 - SB6			
MW122	SB-1	SB125	SB131	SB137	SB180
MW124	SB-2	SB126	SB132	SB138	SB181
MW120	SB-3	SB127	SB133	SB139	SB182
MW121	SB-4	SB128	SB134	SB140	SB183
MW119	SB-5	SB129	SB135	SB141	SB184
MW007	SB-6	SB130	SB136	SB142	SB185

NOTE: THERE ARE A TOTAL OF 6 SOIL BORING LOCATIONS. THESE LOCATIONS ARE MW 118 THROUGH MW 122 AND SB 123

MANTECH ENVIRONMENTAL CORPORATION
MANTECH PROJECT #: 5007-

KELLY AIR FORCE BASE
SAN ANTONIO AIR LOGISTIC CENTER
SANT ANTONIO, TEXAS

AREA E-1
SOIL BORING LOCATIONS

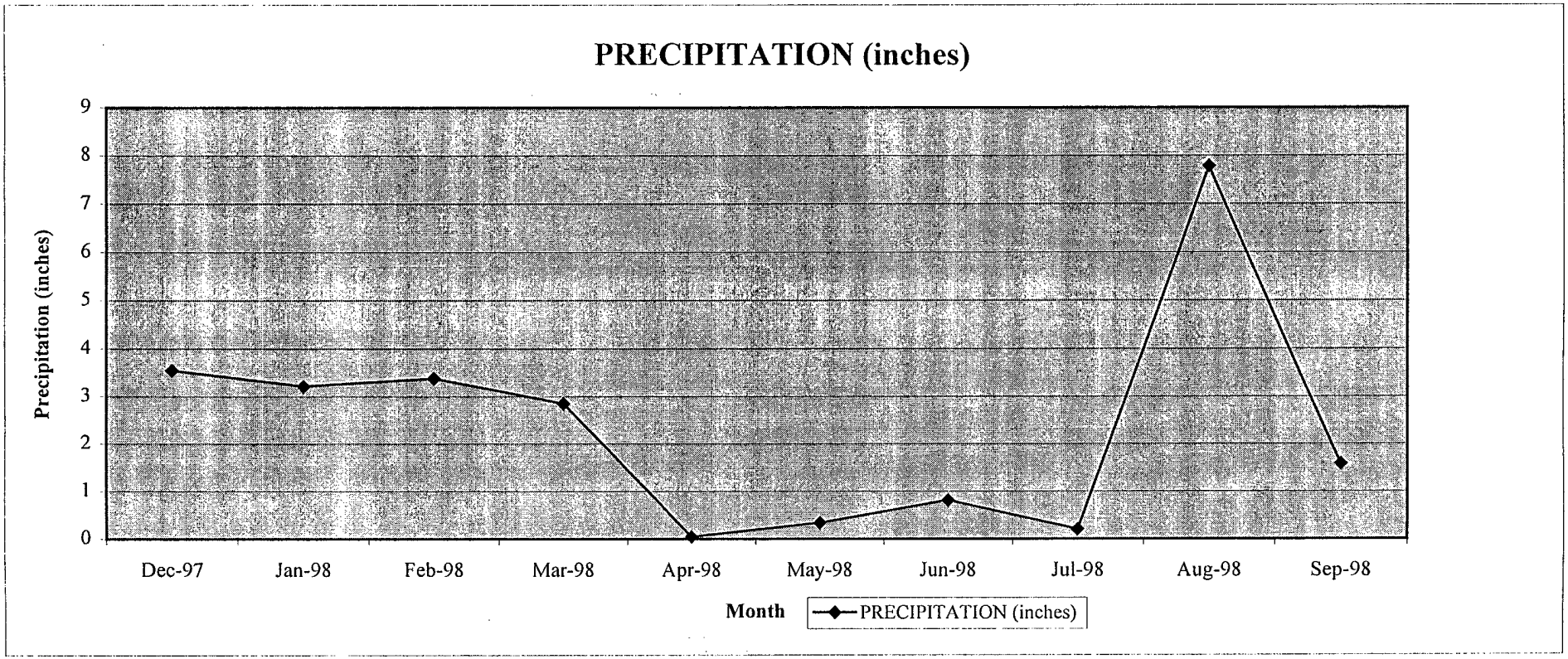
FIGURE
3

APPENDIX B

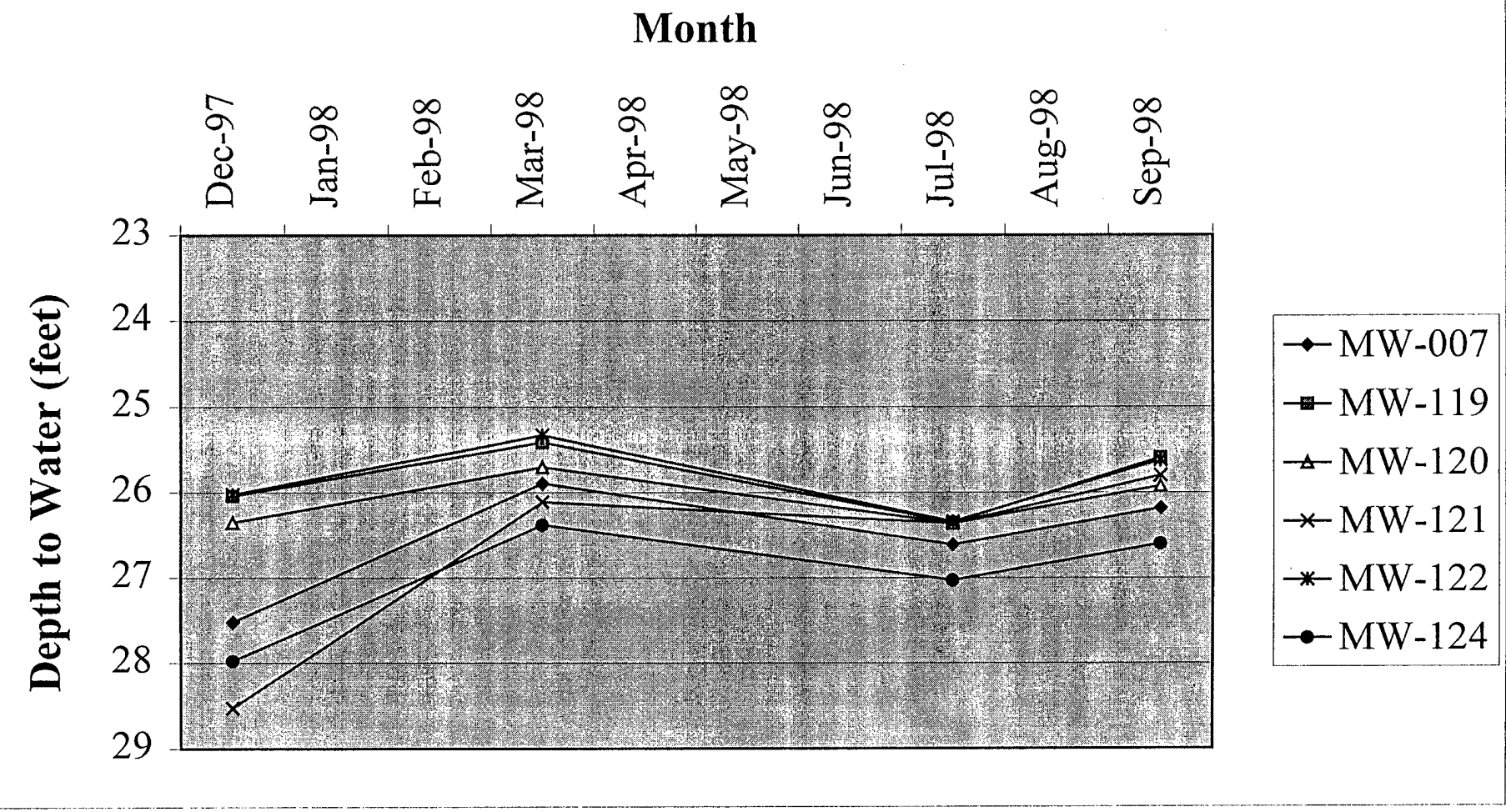
HYDROLOGY FIGURES

Kelly AFB Average Monthly Precipitation
Dec 1997- Sep 1998

DATE	PRECIPITATION (inches)
Dec-97	3.55
Jan-98	3.22
Feb-98	3.38
Mar-98	2.85
Apr-98	0.05
May-98	0.34
Jun-98	0.81
Jul-98	0.21
Aug-98	7.78
Sep-98	1.58



Depth to Water



APPENDIX C

BORING LOGS

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO TX

Geologist: GIANNI CHERUZZI

Log of Borehole: MW118 (renamed SB123)

Riser Dia: N/A

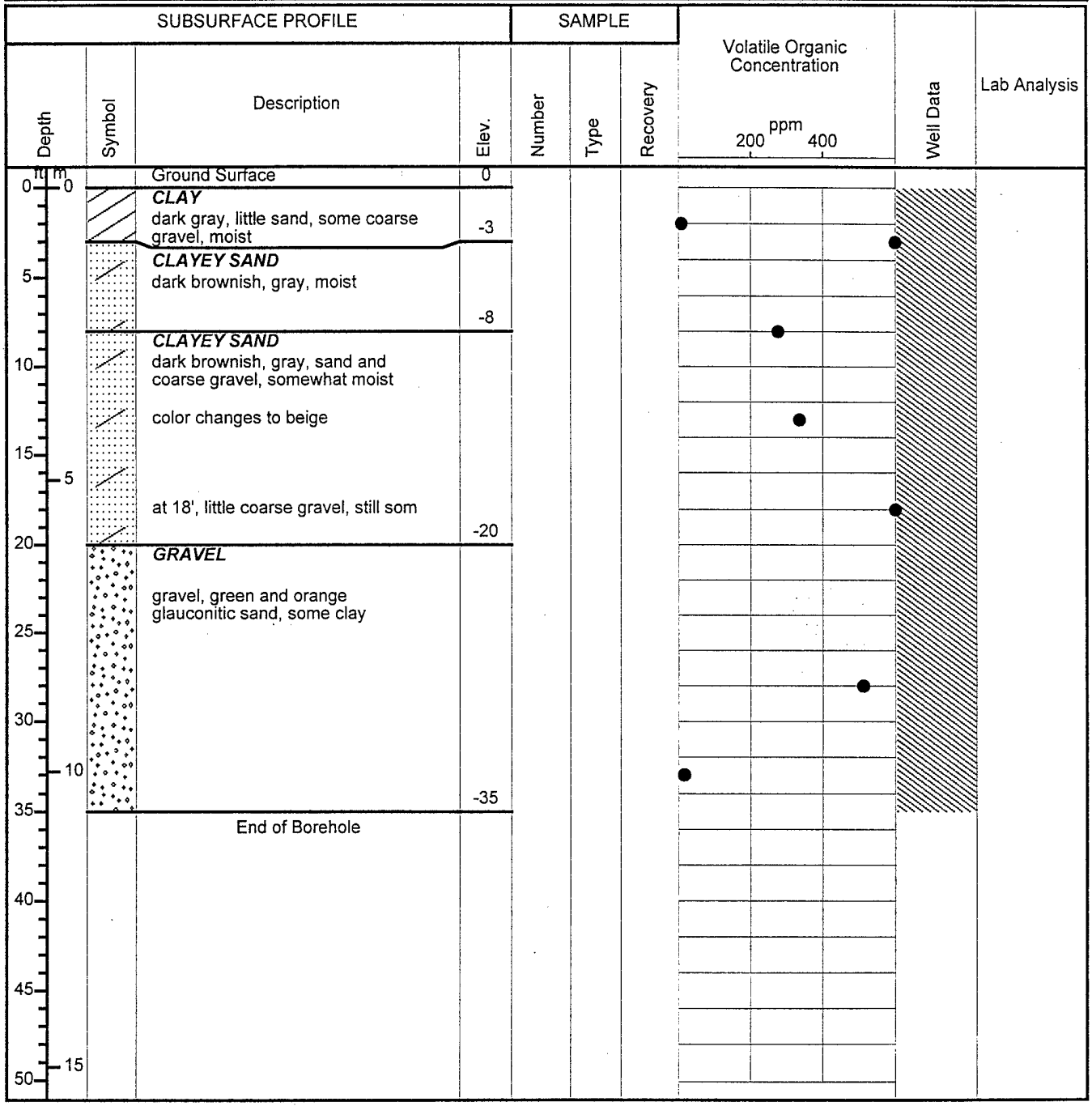
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 35'



Drill Date: 11/18/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: AFCEE

Location: SAN ANTONIO TX

Geologist: GIANNI CHERUZZI

Log of Borehole: MW119

Riser Dia: 2"

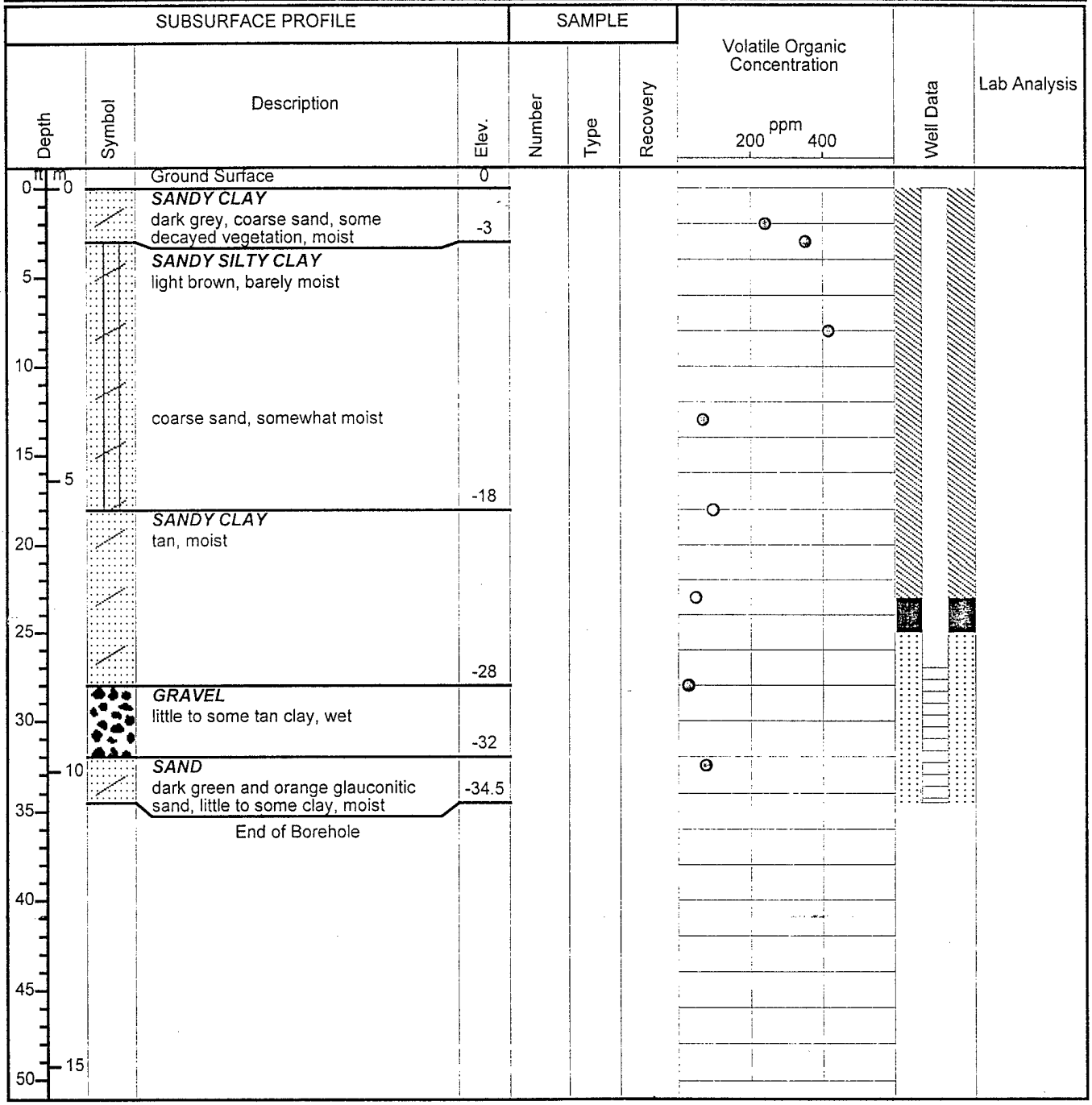
Screen Dia: 2"

Screen Slot Size: 0.010"

Riser Length: 24.5'

Screen Length: 7.5'

Total Depth Drilled: 34.5'



Drill Date: 11/17/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO TX

Geologist: GIANNI CHERUZZI

Log of Borehole: MW120

Riser Dia: 2"

Screen Dia: 2"

Screen Slot Size: 0.010"

Riser Length: 25'

Screen Length: 5'

Total Depth Drilled: 43'

Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	Volatile Organic Concentration (ppm, 200–400)	Well Data	Lab Analysis
0 / 0		Ground Surface	0						
		SANDY CLAY sandy clay with some gravel, some iron staining, moist	-2						
5		***SANDY CLAY*** clayey sand, little gravel, soome iron and blue draining, moist	-9						
10		***CLAYEY SAND*** beige, a little coarse sand, moist	-13						
15 / 5		***CLAYEY SAND*** some gravel, moist	-18						
20		***SANDY CLAY*** beige, some gravel, moist, hard driving starting at 20'	-23						
25		***CLAYEY SAND*** coarse chart gravel, dry gravel ends at 27.5'	-28						
30 / 10		***GLAUCONITIC SAND*** reddish brown _green, some clay , moist							
35									
40			-43						
45 / 15		End of Borehole							
50									

Drill Date: 11/17/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO

Geologist: GIANNI CHERUZZI

Log of Borehole: MW121

Riser Dia: 2"

Screen Dia: 2"

Screen Slot Size: 0.010"

Riser Length: 25'

Screen Length: 5"

Total Depth Drilled: 30

Depth (ft)	Depth (m)	Description	Elev.	Number	Type	Recovery	Volatile Organic Concentration (ppm, 800 / 1600 / 2400)	Well Data	Lab Analysis
0	0	Ground Surface	0						
		SILTY CLAY dark brown, little coarse sand, moist	-3						
5		***SILTY CLAY*** dark brown, clay and cobbles, moist	-8						
10		***SANDY CLAY*** dark brown, beige, silt, slightly moist	-13						
15	5	***CLAYEY SAND*** some clay intervals, slightly moist	-18						
20		***SANDY CLAY*** beige, some dark spots, moist at 23' gray clay, little sand, moist	-28						
30	10	***GLAUCONITIC SAND*** orange and green, some clay, somewhat moist	-30						
		End of Borehole							
35									
40									
45									
50	15								

Drill Date: 11/18/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO

Geologist: GIANNI CHERUZZI

Log of Borehole: MW122

Riser Dia: 2"

Screen Dia: 2"

Screen Slot Size: 0.010"

Riser Length: 25'

Screen Length: 5'

Total Depth Drilled: 30"

SUBSURFACE PROFILE				SAMPLE					
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	Volatile Organic Concentration (ppm, 300–600)	Well Data	Lab Analysis
0 / 0		Ground Surface	0						
		SILTY SAND dark brown, with decayed vegetable matter (roots), moist dark brown grading to beige, barely moist	-8						
10		***SILTY CLAYEY SAND*** beige, little gravel, barely moist	-13						
15 / 5		***SANDY SILTY CLAY*** beige, one 4" fine sand interval near bottom of the spoon, barely moist	-18						
20		***SANDY CLAY*** tan, somewhat moist greenish tan, grading to clayey sand, little gravel, some roots	-28						
30 / 10		***SAND*** orange and green, some clay, wet, more than 2' of water in borehole	-30						
		End of Borehole							
50 / 15									

Drill Date: 11/18/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO

Geologist: GIANNI CHERUZZI

Log of Borehole: MW124

Riser Dia: 2"

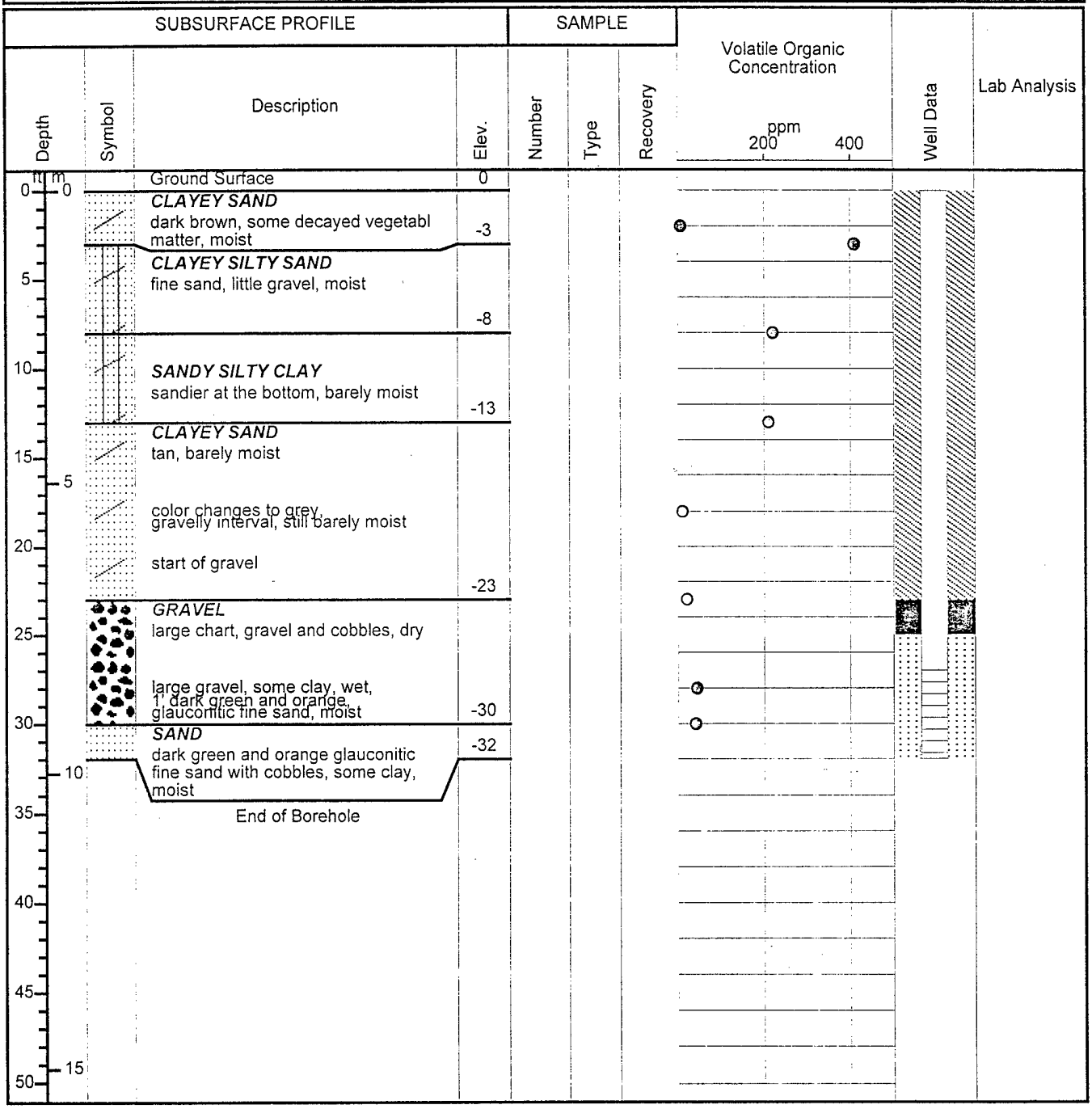
Screen Dia: 2"

Screen Slot Size: 0.010"

Riser Length: 27'

Screen Length: 5'

Total Depth Drilled: 32



Drill Date: 11/18/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO, TX

Geologist: TOM DWYER

Log of Borehole: SB-125

Riser Dia: N/A

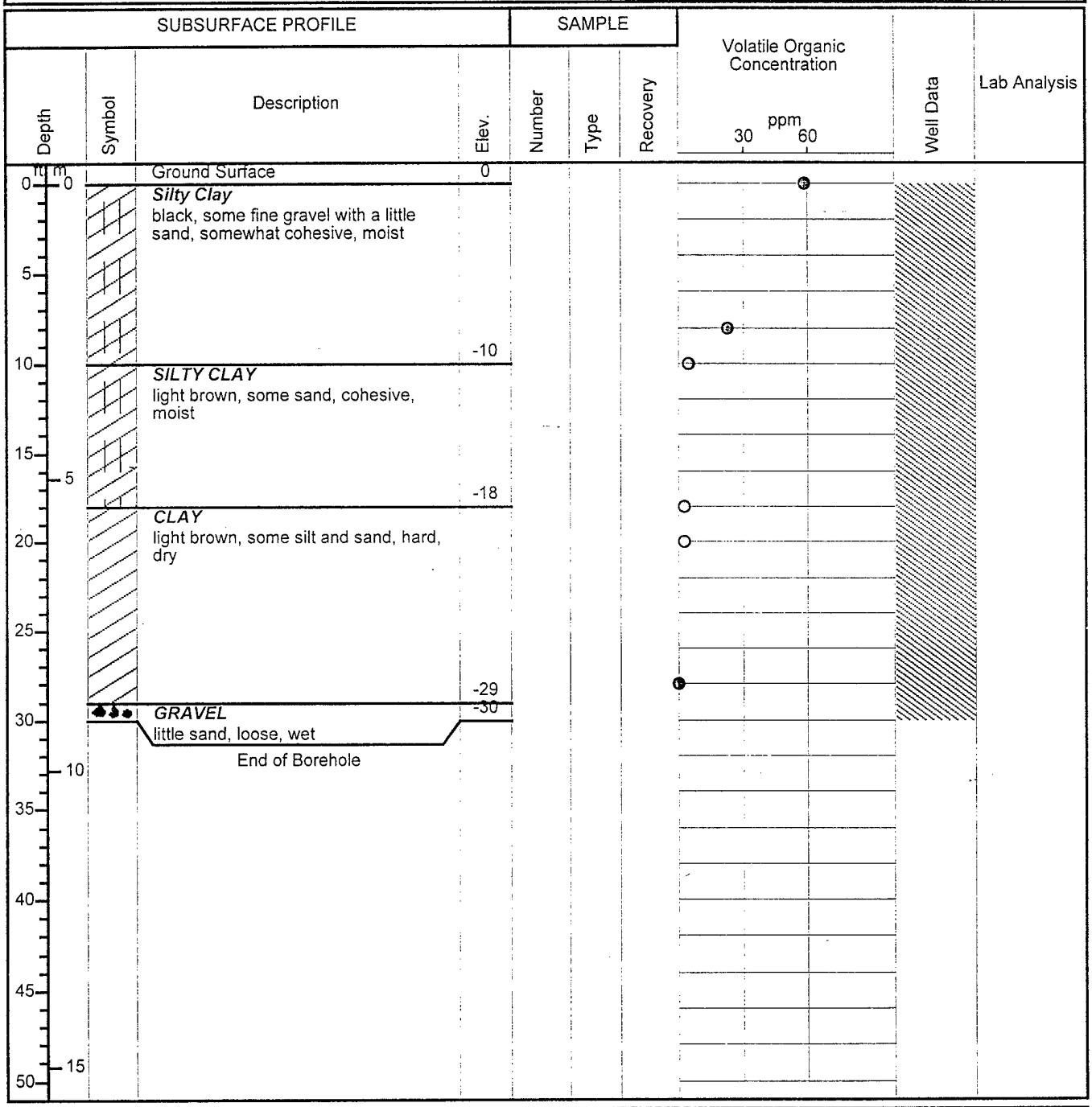
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'



Drill Date: 4/14/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client:

Location: SAN ANTONIO, TX

Geologist: TOM DWYER

Log of Borehole: SB-126

Riser Dia: N/A

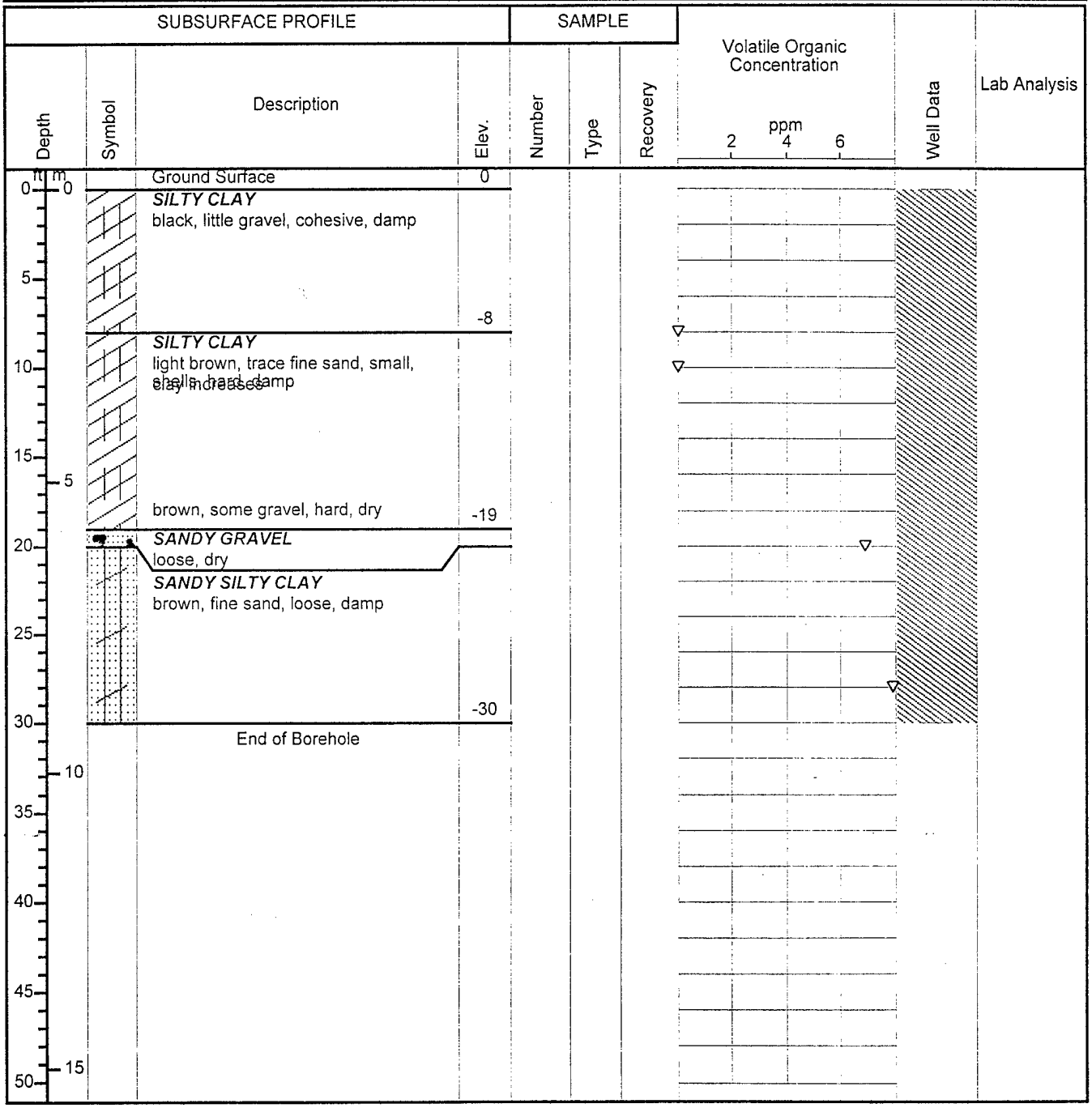
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'



Drill Date: 4/14/98

Driller:

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client:

Location: SAN ANTONIO, TX

Geologist: TOM DWYER

Log of Borehole: SB-126

Riser Dia: N/A

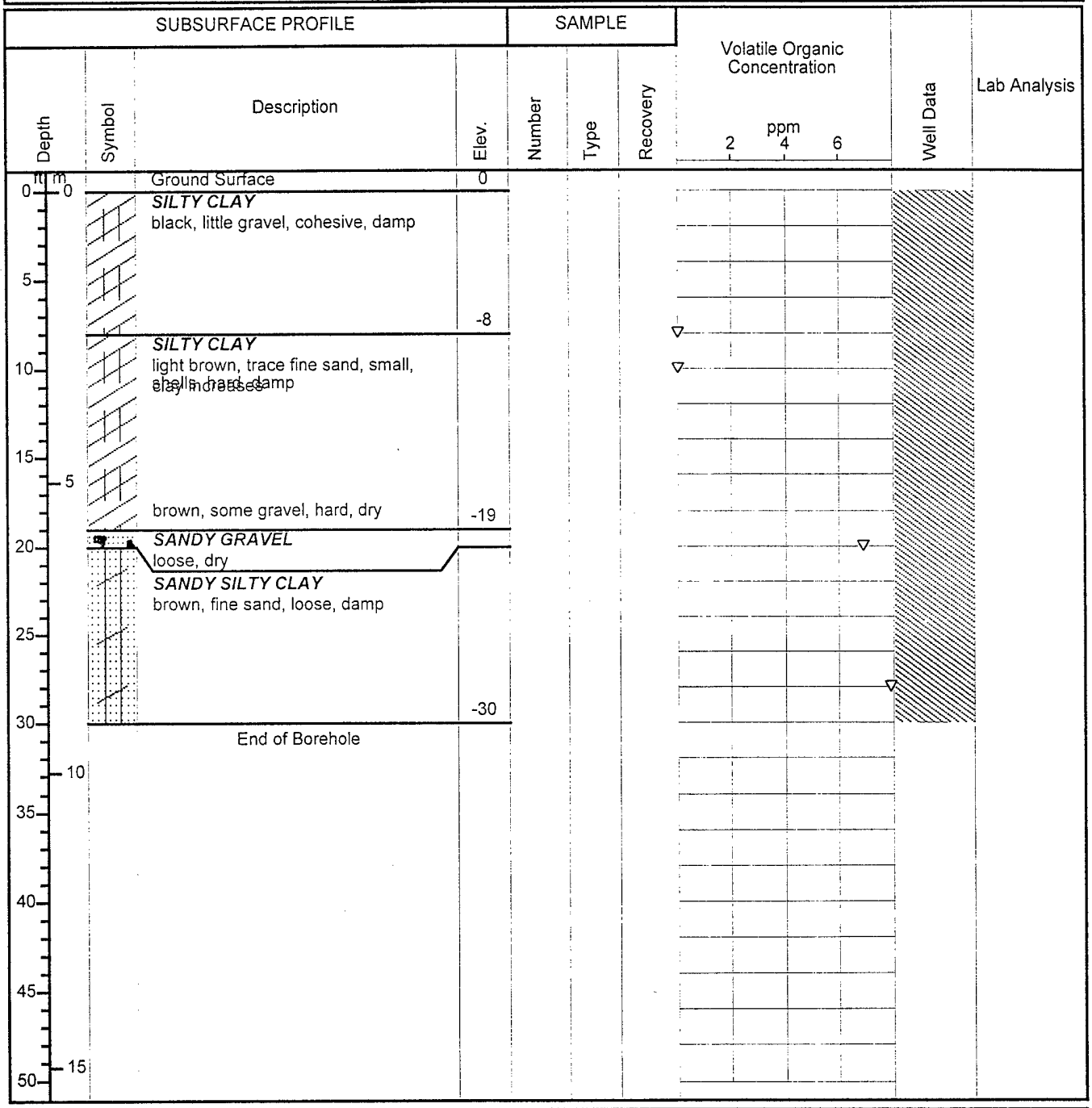
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'



Drill Date: 4/14/98

Driller:

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO, TX

Geologist: TOM DWYER

Log of Borehole: SB-127

Riser Dia: NA

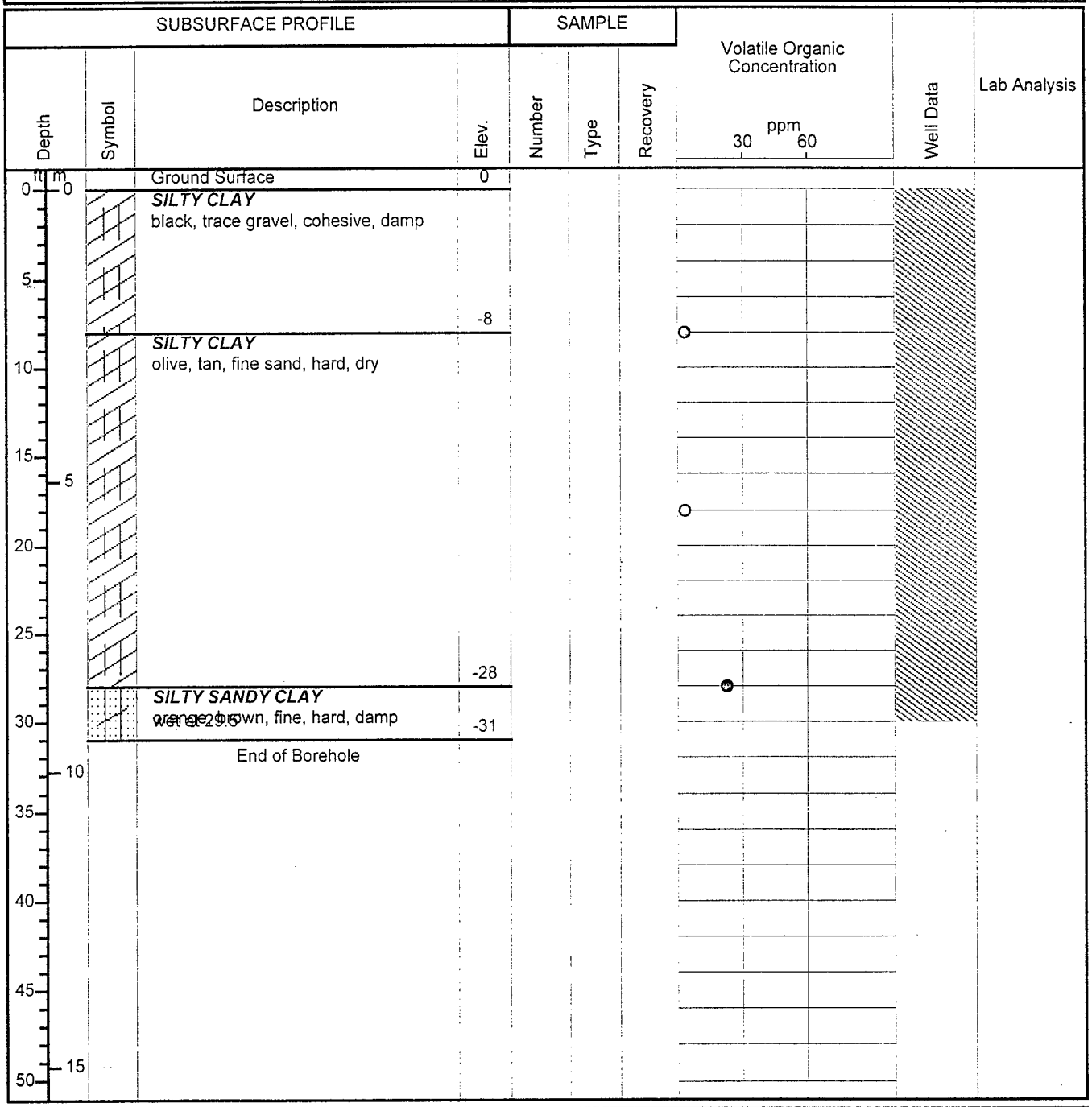
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'



Drill Date: 4/14/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO

Geologist: TOM DWYER

Log of Borehole: SB-128

Riser Dia: N/A

Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 20'

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration		
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	ppm 200 400	Well Data	Lab Analysis
0 / 0		Ground Surface	0						
		SILTY CLAY light brown, some sand and gravel, cohesive, moist							
5									
10			-10						
		CLAYEY SILT light brown, with fine sand, little gravel, hard, dry							
15 / 5									
20			-20						
		End of Borehole							
25									

Drill Date: 4/14/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO TX

Geologist: TOM DWYER

Log of Borehole: SB-129

Riser Dia: N/A

Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'

SUBSURFACE PROFILE				SAMPLE			Volatile Organic Concentration		
Depth (ft / m)	Symbol	Description	Elev.	Number	Type	Recovery	ppm 200 400	Well Data	Lab Analysis
0 / 0		Ground Surface	0						
		SILTY CLAY light brown, some sand _gravel							
5									
		trace of course sand and fine gravel, dry hard							
10									
15 / 5		color changes to olive-brown, hard, cohesive, damp							
20									
25			-28						
30 / 10		***SAND AND GRAVEL*** coarse, hard, wet	-30						
		End of Borehole							
35									
40									
45									
50 / 15									

Drill Date: 4/15/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO TX

Geologist: TOM DWYER

Log of Borehole: SB-130

Riser Dia: N/A

Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 30'

Depth (ft / m)	Symbol	Description	Elev.	Sample Number	Sample Type	Sample Recovery	Volatile Organic Concentration (ppm, 200–400)	Well Data	Lab Analysis
0 / 0		Ground Surface	0						
0		***GRAVEL*** dark brown, sand and gravel, loose, dry							
			-8						
10		***SILTY CLAY*** a little fine sand, trace of gravel, odor cohesive, damp							
5		color changes to olive, light brown							
25		color changes to gray, stiff,damp	-29						
30		***SILTY SAND*** green, fine, some clay, hard, damp	-29.9						
10		End of Borehole							

Drill Date: 4/15/98

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5007-410

Project: KELLY AIR FORCE BASE

Client: ACFEE

Location: SAN ANTONIO

Geologist: GIANNI CHERUZZI

Log of Borehole: SB123

Riser Dia: N/A

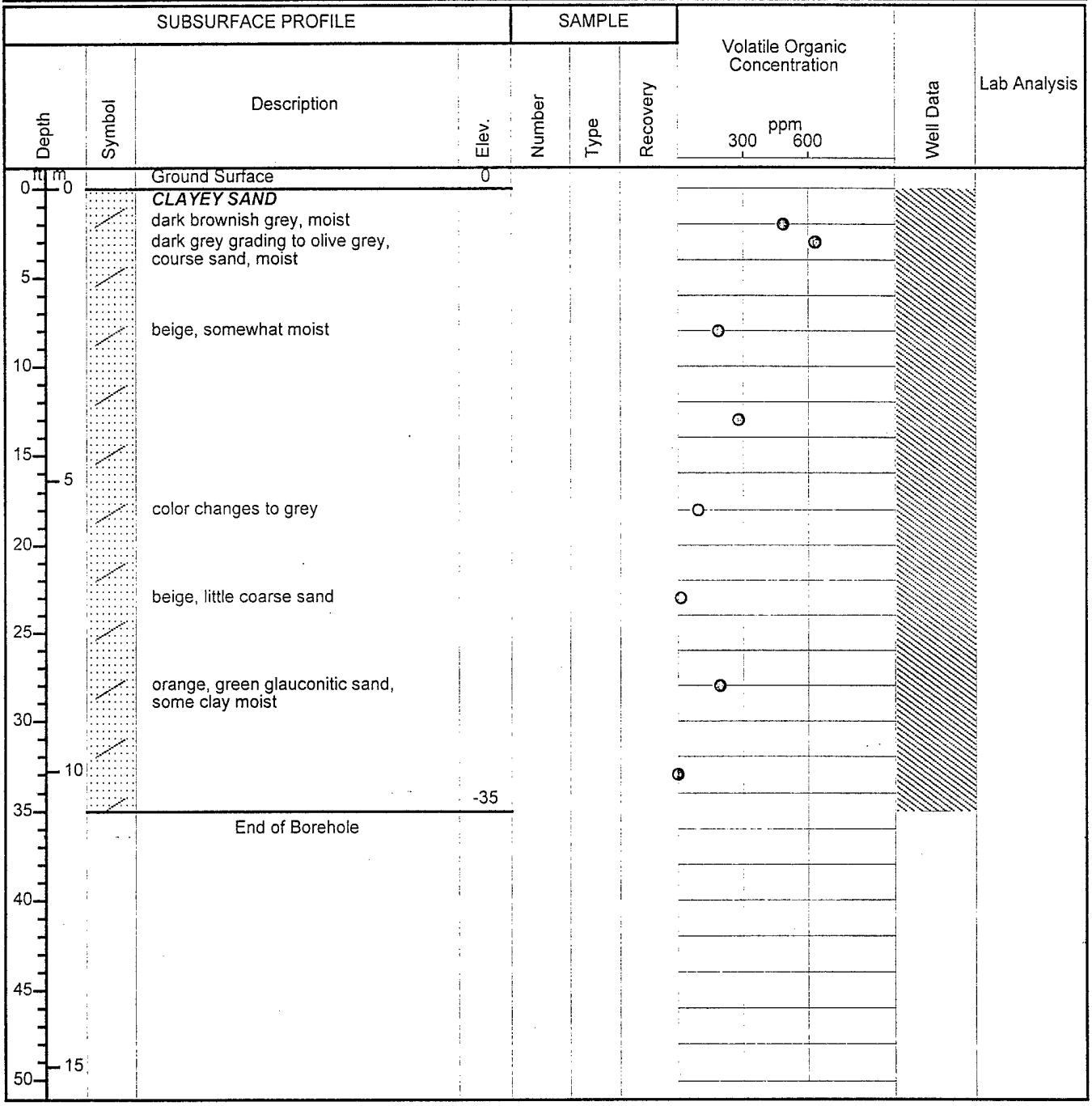
Screen Dia: N/A

Screen Slot Size: N/A

Riser Length: N/A

Screen Length: N/A

Total Depth Drilled: 35'



Drill Date: 11/18/97

Driller: JEDI

Drill Method: HOLLOW STEM AUGER

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum:

Checked by:

Sheet: 1 of 1

Project No: 5004-540 N/A

Log of Borehole: SB-186

Project: Kelly Air Force Base

Client: AFCEE Mike Joseph

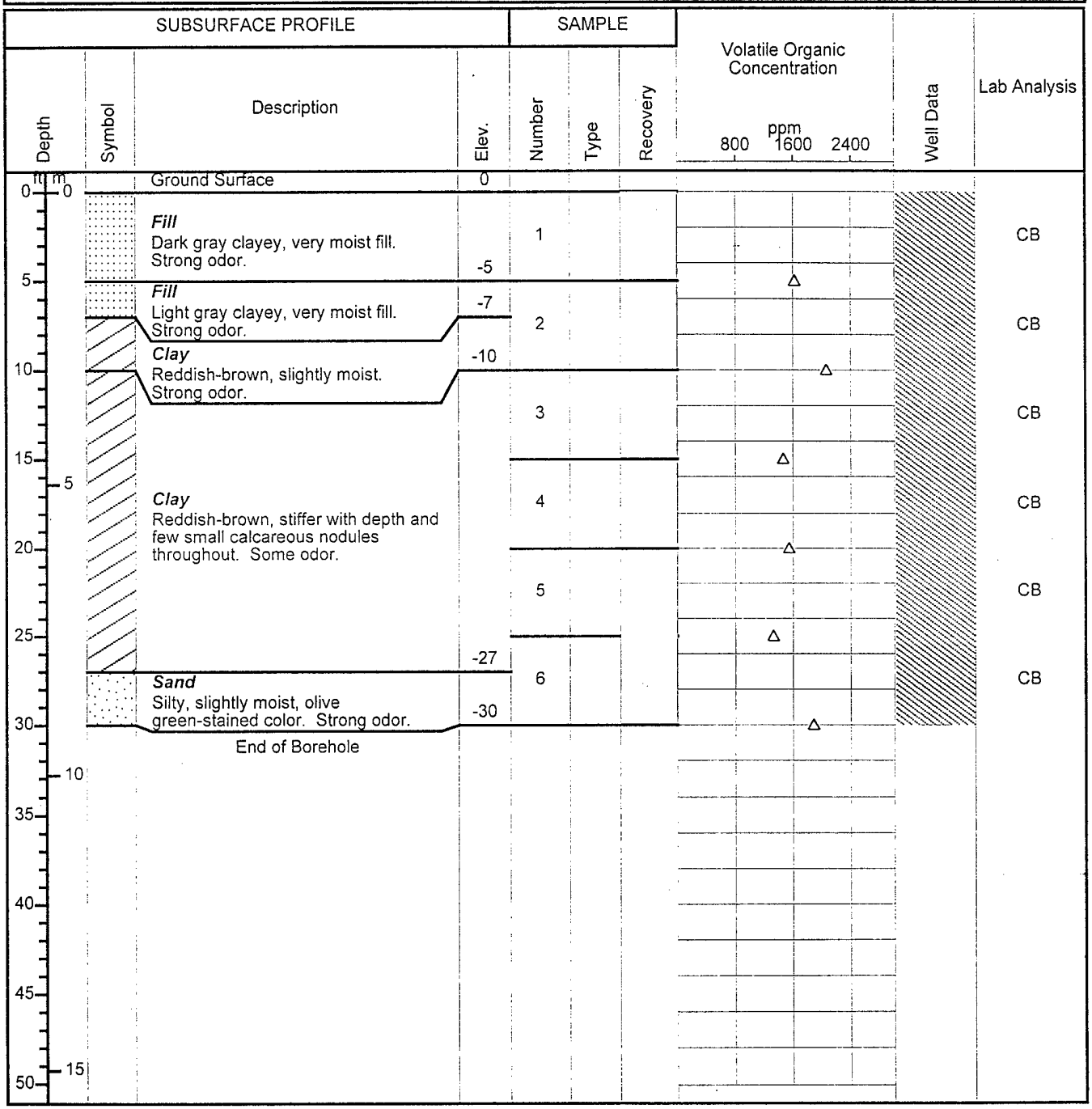
Location: San Antonio

Geologist:

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet



Drill Date: 05-12-99

Driller: Best Drilling Services

Drill Method: Hollow Stem Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

Sheet: 1 of 1

Project No: 5007-540 N/A

Log of Borehole: SB-187

Project: Kelly Air Force Base

Client: AFCEE-Kelly Mike Joseph

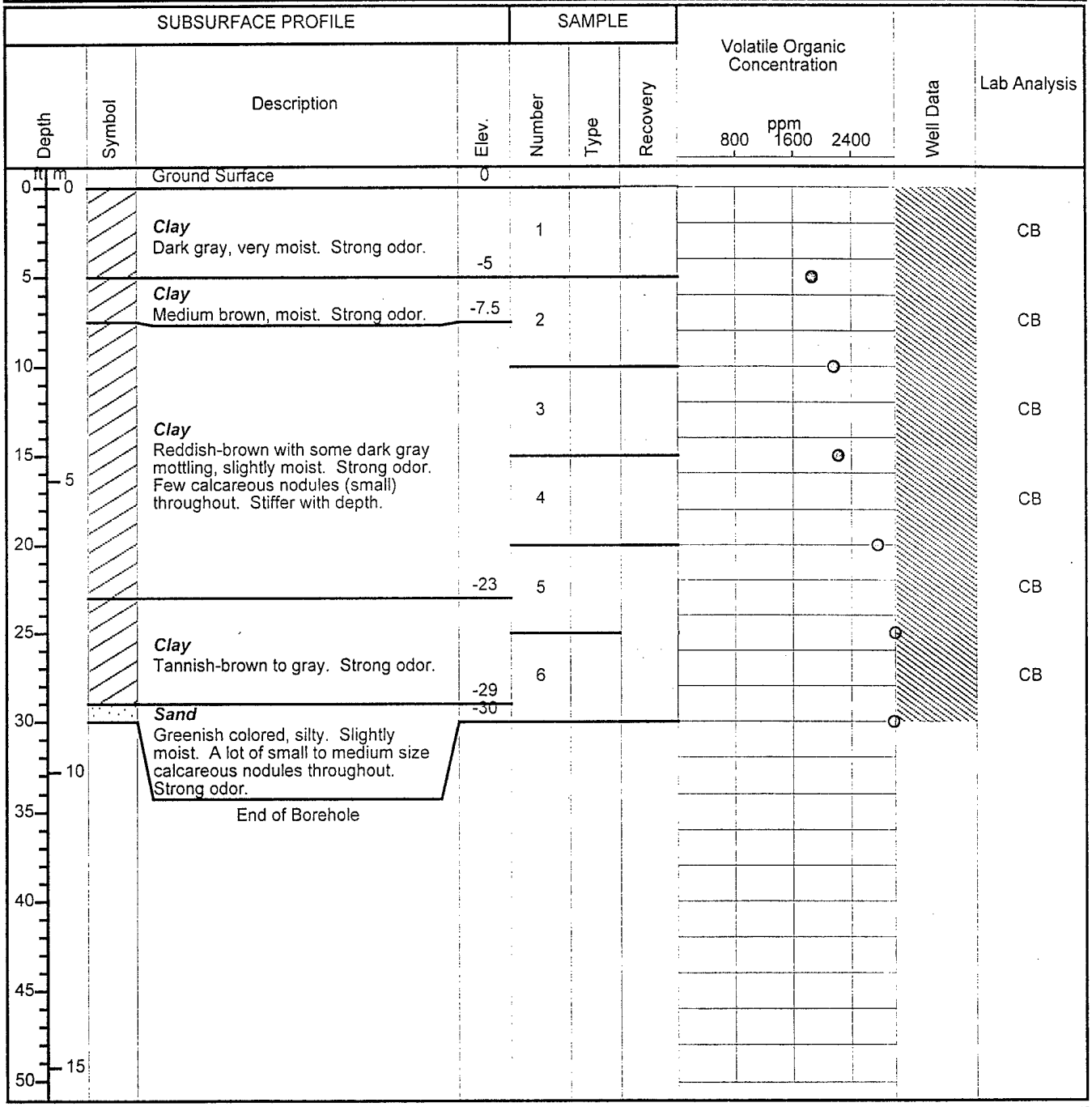
Location: San Antonio

Geologist:

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet



Drill Date: 05-12-99

Driller: Best Drilling Services

Drill Method: Stem Hollow Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

Sheet: 1 of 1

Project No: 5007-540 N/A

Log of Borehole: SB-189

Project: Kelly Air Force Base

Client: AFCEE-Kelly Mike Joseph

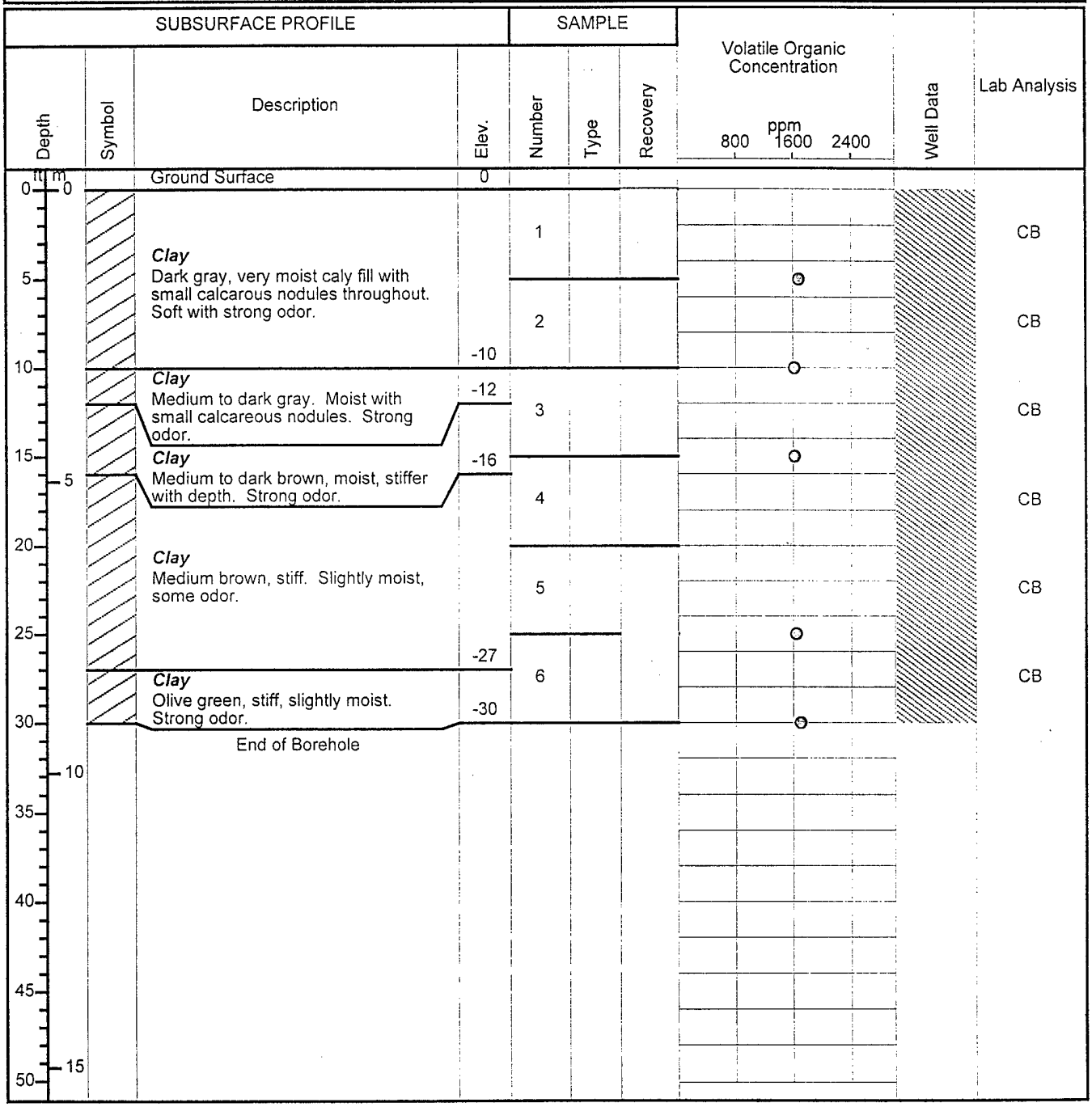
Location: San Antonio

Geologist:

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet.



Drill Date: 5-12-99

Driller: Best Drilling Services

Drill Method: Hollow Stem Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

Sheet: 1 of 1

Project No: 5007-540 N/A

Log of Borehole: SB-190

Project: Kelly Air Force Base

Client: AFCEE-Kelly Mike Joseph

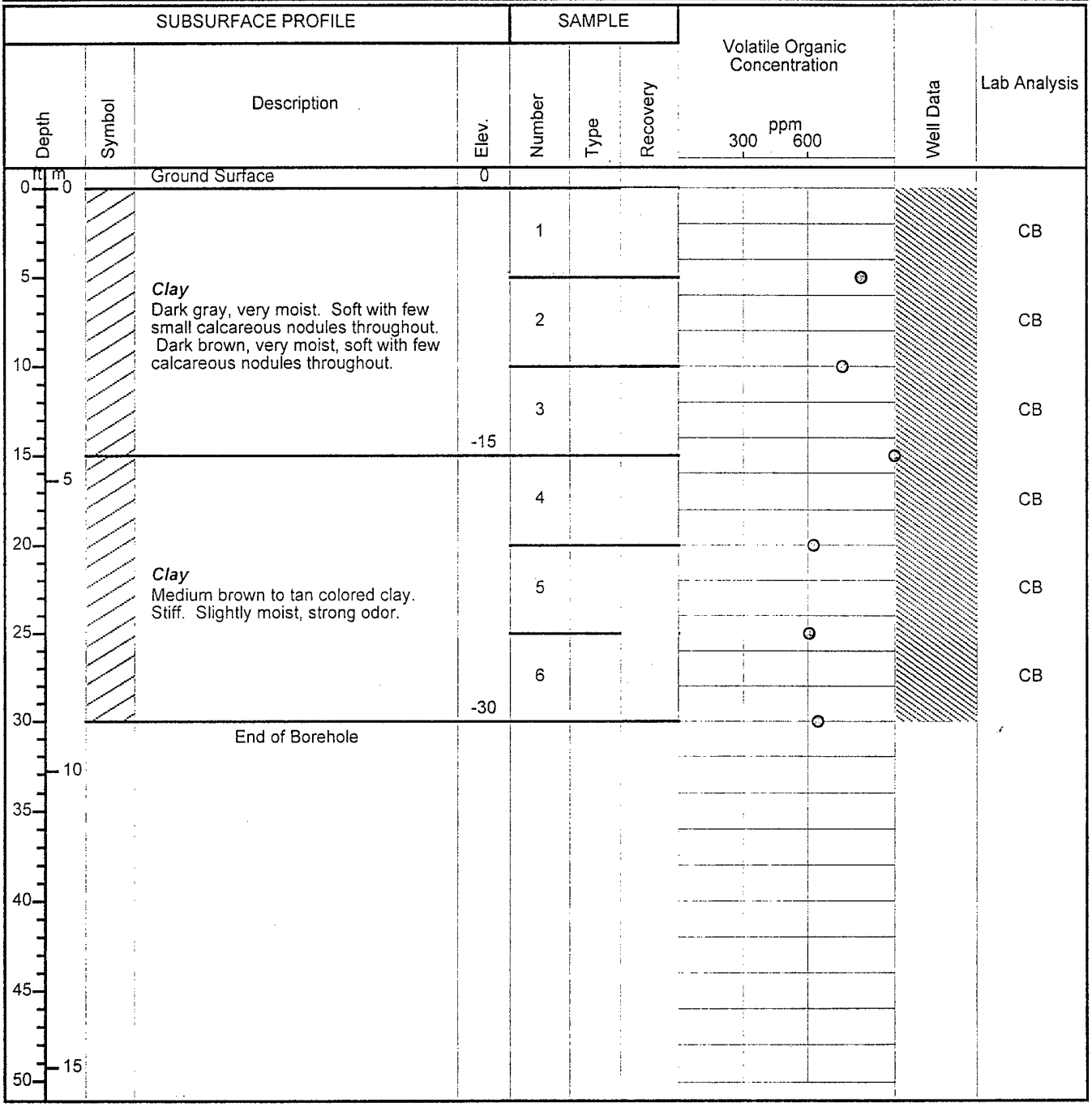
Location: San Antonio

Geologist:

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet.



Drill Date: 05-12-99

Driller: Best Drilling Services

Drill Method: Hollow Stem Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

Sheet: 1 of 1

Project No: 5007-540 N/A

Project: Kelly Air Force Base

Client: AFCEE-Kelly Mike Joseph

Location: San Antonio

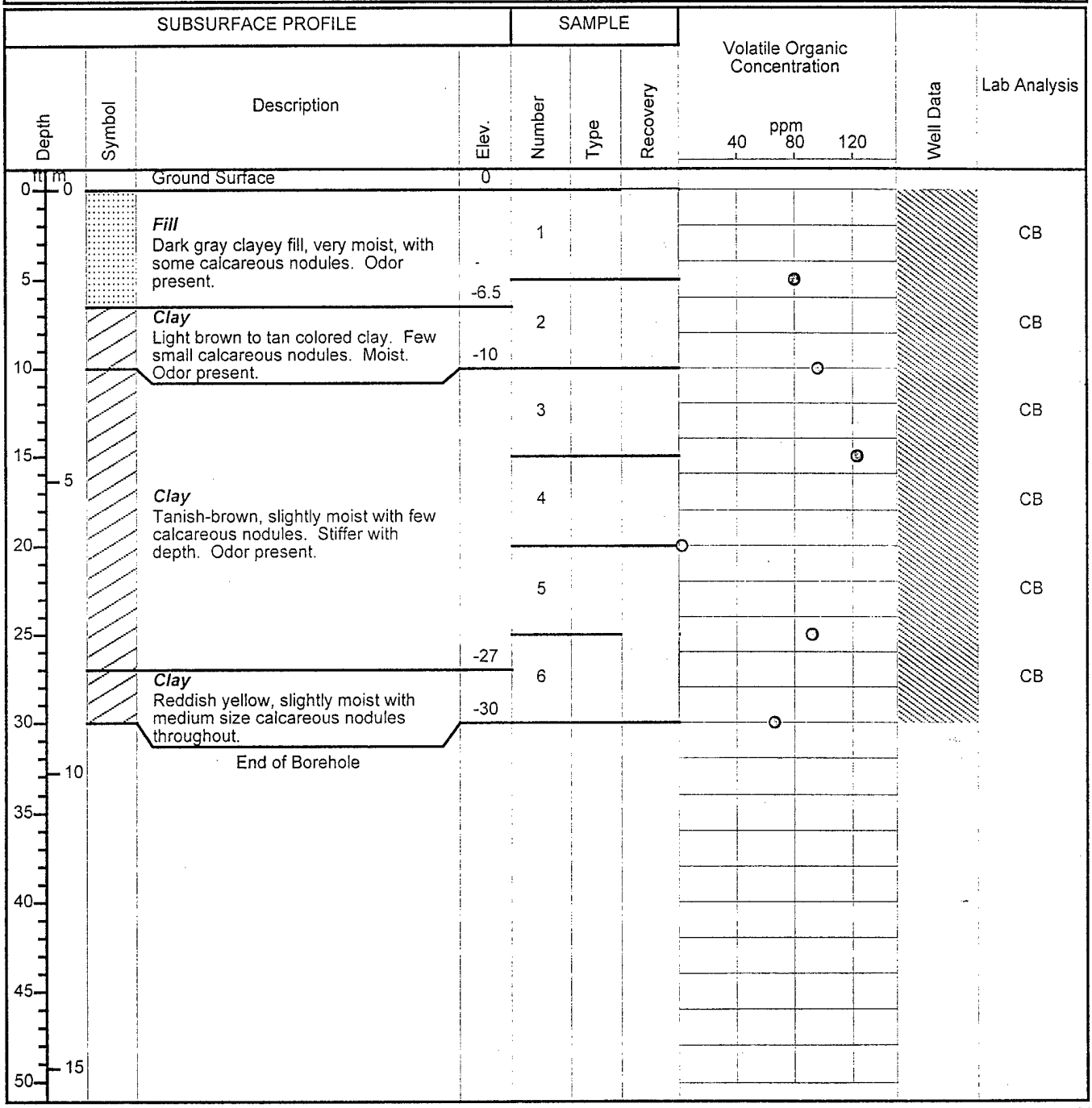
Geologist:

Log of Borehole: SB-191

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet.



Drill Date: 05-12-99

Driller: Best Drilling Services

Drill Method: Hollow Stem Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

Sheet: 1 of 1

Project No: 5007-540 N/A

Log of Borehole: SB-192

Project: Kelly Air Force Base

Client: AFCEE Mike Joseph

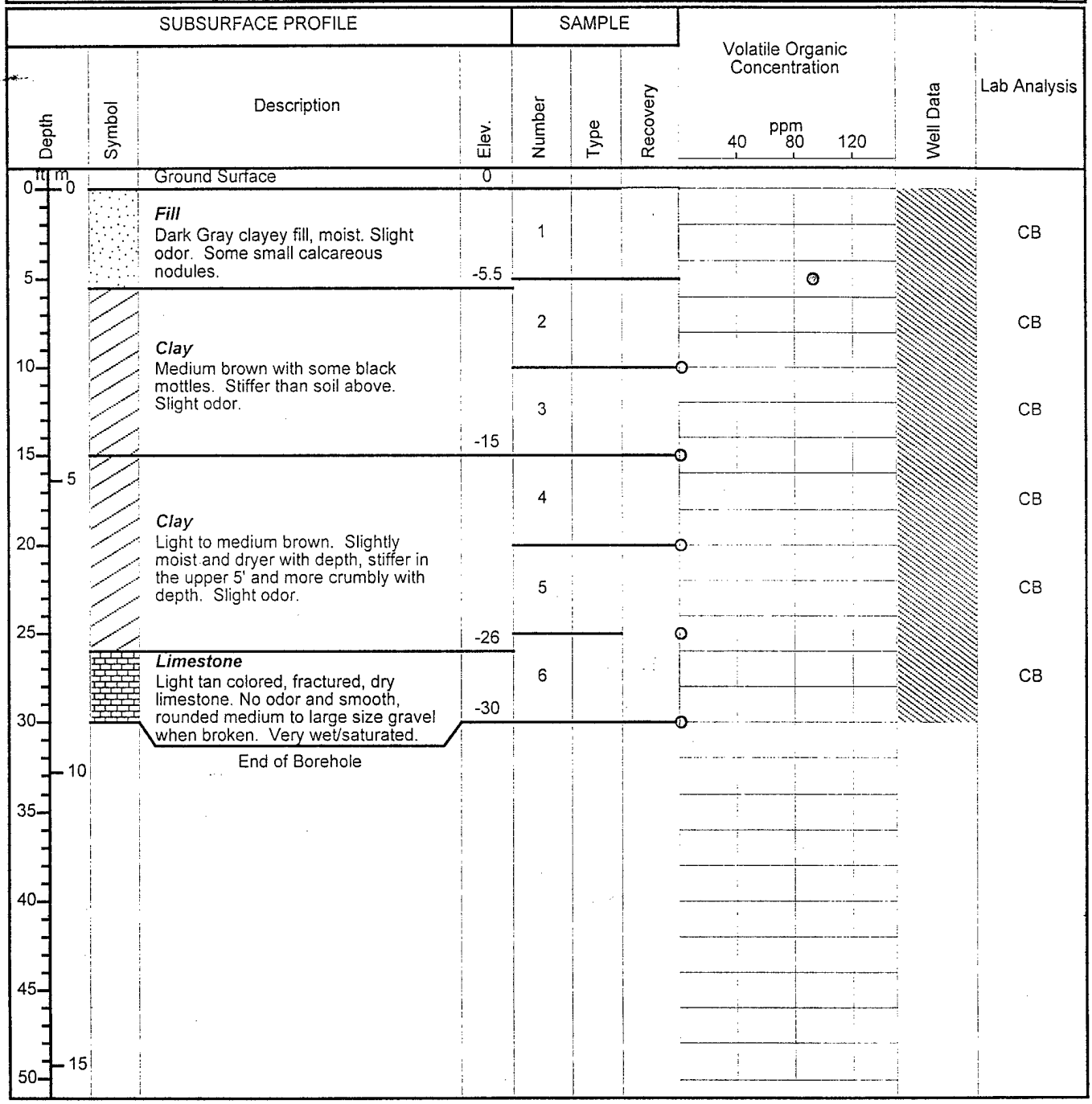
Location: San Antonio

Geologist:

Riser Dia: N/A **Riser Length:** N/A

Screen Dia: N/A **Screen Length:** N/A

Screen Slot Size: N/A **Total Depth Drilled:** 30 feet.



Drill Date: 5-12-99

Driller: Best Drilling Services

Drill Method: Hollow Stem Auger

Hole Size: 8.25"

ManTech Environmental Corp
1900 West Loop South
Suite 850
Houston, TX 77027 (713) 585-7000

Datum: N/A

Checked by: Mike Joseph

APPENDIX D

GROUNDWATER SAMPLING ANALYTICAL RESULTS

Kelly AFB E-1 Site
TPH as GRO/DRO
Groundwater

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	GRO		DRO	
MW-007							
	12/24/1997	water		1,900.0	J	300.0	J
	04/27/1998	water		9,360.0		1,000.0	J
	07/01/1998	water		1,600.0			NA
	09/02/1998	water		770.0		700.0	
	10/28/1998	water		31,000.0		1,800.0	
	05/11/1999	water		1,840.0		1,000.0	U
MW-119							
	12/24/1997	water		1,600.0	J	1,400.0	J
	04/27/1998	water		9,330.0		900.0	J
	07/01/1998	water		1,340.0		600.0	J
	09/01/1998	water		1,810.0		1,000.0	U
	10/28/1998	water		9,000.0		1,600.0	
	05/10/1999	water		913.0		1,010.0	
MW-120	12/24/1997	water		14,500.0	E	2,500.0	J
	04/28/1998	water		172,020.0		2,800.0	JD
	07/01/1998	water		35,150.0		1,900.0	J
	09/02/1998	water		2,440.0		20,000.0	U
	10/28/1998	water		180,000.0		5,400.0	
	05/11/1999	water		19,600.0		4,730.0	
MW-121							
	12/24/1997	water		94,700.0	E	22,400.0	E
	04/28/1998	water		214,020.0			NA
	07/01/1998	water		*		*	
	09/02/1998	water		11,200.0		135,000.0	U
	10/28/1998	water		180,000.0		57,000.0	
	05/11/1999	water		228,000.0			
MW-122							
	12/24/1997	water		1,000.0		1,000.0	J
	04/27/1998	water		22,490.0		1,500.0	
	07/01/1998	water		1,050.0		400.0	
	09/01/1998	water		2,270.0		1,000.0	U
	10/28/1998	water		11,000.0		3,600.0	
	05/10/1999	water		730.0		1,230.0	
MW-124							
	12/24/1997	water		1,300.0	J	1,900.0	J
	04/27/1998	water		12,770.0		1,800.0	
	07/01/1998	water		1,000.0	U	400.0	J
	09/01/1998	water		1,900.0		1,000.0	U
	10/28/1998	water		24,000.0		2,600.0	
	05/10/1999	water		2,750.0		1,830.0	

GW Averages w/o MW-122	12/24/1997	22,800	5,700
	04/27/1998	83,500	1,625
	07/01/1998	9,523	967
	09/01/1998	3,624	140
	10/28/1998	84,800	13,680
	05/10/1999	50,621	1,893

KELLY AIR FORCE BASE
VOC GROUNDWATER RESULTS

ample ID	Date Analyzed:	Matrix Soil or Water	Dichloro-difluoro-methane	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane	1,1 Di-chloro-ethene	Methylene chloride	Trans-1,2 dichloro-ethene	1,1 Di-chloro-ethane	2,2 Di-chloro-propane	Cis-1,2 Di-chloro-ethene	Bromo-chloro-methane	Chloroform	1,1,1-Tri-chloro ethane	Carbon Tetra Chloride
MW-007																		
	12/24/1997	water	1.0 U	1.3 U	6,600 D!	1.1 U	0.25	0.8 U	289.8 E	3.4 B	201.3 E	584.3 E	3.5 U	123,000.0 D!	0.4 U	0.3 U	4.8	2.1 U
	04/27/1998	water	1.0 U	1.3 U	3,600	1.1 U	4.0	0.8 U	190.0 &	5.0 B	210.0 &	840.0 &	3.5 U	101,000.0 *	0.4 U	0.3 U	0.8 U	2.1 U
	07/01/1998	water	1.0 U	1.3 U	1,400 D	1.1 U	1.0 U	0.8 U	71.5 E	3.0	180.0 FD	510.0 D	3.5 U	63,000.0 D	0.4 U	0.3 U	0.8 U	2.1 U
	09/15/1998	water	1.0 U	1.3 U	540 E	1.1 U	1.0 U	0.8 U	41	0.7	110.0 E	250.0 E	3.5 U	18,000.0 &	0.4 U	0.3 U	0.8 U	2.1 U
	05/11/1999	water	500 U	650 U	98,600.0 D	550.0 U	500.0 U	400.0 U	600.0 U	150.0 U	300.0 U	465.0	1,750.0 U	80,000.0 D	200.0 U	150.0 U	400.0 U	1,050.0 U
MW-119																		
	12/24/1997	water	1.0 U	1.3 U	2,924.5 E	1.1 U	1.0 U	0.8 U	84.3 E	0.3 U	35.2	111.3 E	3.5 U	14,890.0 D!	0.4 U	0.7	8.9	2.1 U
	04/27/1998	water	1.0 U	1.3 U	5,560 &	1.1 U	3.0	0.8 U	51.0	0.3 U	25.0	88.0 E	3.5 U	16,500.0 &	0.4 U	0.3 U	12.0	2.0
	07/01/1998	water	1.0 U	1.3 U	8,900 D	1.1 U	1.0 U	0.8 U	44.1	0.3 U	20.1	100.0 FD	3.5 U	1,400.0 BD	0.4 U	0.3 U	5.3	2.1 U
	09/15/1998	water	1.0 U	1.3 U	7,600 $	1.1 U	1.0 U	0.8 U	57	0.3 U	25.0	72.0 E	3.5 U	19,000.0 $	0.4 U	0.3 U	5.8	2.1 U
	05/10/1999	water	500 U	650 U	40,000.0 D	550 U	500 U	400 U	600 U	150.0 U	300.0 U	200.0 U	1,750.0 U	20,500.0 D	200.0 U	150.0 U	400.0 U	1,050.0 U
MW-120																		
	12/24/1997	water	50.0 U	65.0 U	6,958 D!	55.0 U	50.0 U	40.0 U	536.5 D	118 BD	471.0 D	473.5 D	175.0 U	333,795.0 ED!	20.0 U	47.5 D	49.5 DE	105.0 U
	04/29/1998	water	1,000.0 U	1,300.0 U	8,690 D	1,100.0 U	1,000.0 U	800.0 U	890 FD	950 BD	550.0 FD	740.0 D	3,500.0 U	340,000.0 !	400.0 U	300.0 U	270.0 FD	2,100.0 U
	07/01/1998	water	1.0 U	1.3 U	7,600 D	1.1 U	1.0 U	0.8 U	640 FD	15.9	350.0 JD	390.0 JD	3.5 U	22,000.0 D	0.4 U	0.3 U	36.8	2.1 U
	09/15/1998	water	1.0 U	1.3 U	2,200 E	1.1 U	1.0 U	0.8 U	230 E	0.3 U	190.0 E	300.0 E	3.5 U	280,000.0 !	0.4 U	0.3 U	0.8 U	2.1 U
	05/11/1999	water	500 U	650 U	35,900.0 E	550 U	500 U	400 U	2,660	150.0 U	2,350.0	1,140.0	1,750.0 U	394,000.0 E	200.0 U	150.0 U	400.0 U	1,050.0 U
MW-121																		
	12/24/1997	water	50.0 U	65.0 U	966 D	55.0 U	50.0 U	40.0 U	2,826 D	1,125 BD	253.5 D	799.0 D	175.0 U	43,625.0 D	20.0 U	436.5 D	371.0 D	105.0 U
	04/29/1998	water	1,000.0 U	1,300.0 U	1,600 D	1,100.0 U	1,000.0 U	800.0 U	3,400 D	2,100 BD	290.0 FD	900.0 D	3,500.0 U	42,000.0 D	400.0 U	500.0 D	370.0 FD	2,100.0 U
	07/01/1998	dry	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/15/1998	water	1.0 U	1.3 U	1,700 E	1.1 U	1.0 U	0.8 U	1,800 E	660 E	180.0 E	990.0	3.5 U	75,000.0 !	0.4 U	200.0 E	0.8 U	2.1 U
	05/11/1999	water	500 U	650 U	12,000.0 E	550 U	500 U	400 U	5,780	1,960	835.0	2,120.0	1,750.0 U	94,000.0 D	200.0 U	350.0 U	400.0 U	1,050.0 U
MW-122																		
	12/24/1997	water	50 U	65.0 U	5,560.0 D	55.0 U	50.0 U	40.0 U	139.5 D	106.5 BD	41.0 D	156.0 D	175.0 U	21,320.0 D	20.0 U	15.0 U	25.0 FD	105.0 U
	04/27/1998	water	1.0 U	1.3 U	7,780.0 &	1.1 U	6.0	0.8 U	150.0 &	5.0 B	58.0	210.0 &	3.5 U	42,000.0 &	0.4 U	0.3 U	42.0	2.1 U
	07/01/1998	water	1.0 U	1.3 U	6,800.0 D	1.1 U	3.5	0.8 U	49.5	0.3	17.1	100.0 FD	3.5 U	15,000.0 BD	0.4 U	0.3 U	8.9	2.1 U
	09/21/1998	water	500 U	650 U	5,080.0 D	550 U	500 U	400 U	600 U	150.0 U	300.0 U	600.0 U	1,750.0 U	26,305.0 D	200.0 U	150.0 U	400.0 U	1,050.0 U
	05/11/1999	water	5.0 U	6.5 U	159,000.0 D	5.5 U	7.9	4.0 U	98.2	3.6	465.0 D	152.0	17.5 U	101,000.0 D	2.0 U	1.5 U	29.4	10.8
MW-124																		
	12/24/1997	water	50.0 U	65.0 U	7,710.0 D	55.0 U	50.0 U	40.0 U	136.0 U	111.0 BD	31.0 D	132.0 D	175.0 U	29,770.0 D	20.0 U	15.0 U	77.5 D	105.0 U
	04/27/1998	water	1.0 U	1.3 U	6,400.0 &	1.1 U	1.0 U	0.8 U	72.0 E	0.3 U	23.0	86.0 E	3.5 U	2,200.0 &	0.4 U	0.3 U	59.0	2.1 U
	07/01/1998	water	1.0 U	1.3 U	5400 D	1.1 U	1.0 U	0.8 U	31.3	0.3 U	10.8	42.5	3.5 U	1,000.0 BD	0.4 U	0.3 U	16.4	2.1 U
	09/15/1998	water	1.0 U	1.3 U	6,600 $	1.1 U	1.0 U	0.8 U	59	0.3 U	23.0	61.0 E	3.5 U	22,000.0 $	0.4 U	0.3 U	21.0	2.1 U
	05/11/1999	water	1 U	1.3 U	18,100 D	1.1 U	2.62	0.8 U	172 E	1.6	108.0	90.0 D	3.5 U	9,870.0 D	0.4 U	1.8	98.9	2.1 U
EB-1																		
	04/27/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.6 B	0.6 U	0.4 U	3.5 U	1.2 U	0.4 U	0.3 U	0.8 U	2.1 U
NI																		
	04/27/1998	water	1000 U	1,300.0 U	6,200.0 D	1,100.0 U	1,000.0 U	800.0 U	1,200.0 U	690.0 BD	600.0 U	110.0 FD	3,500.0 U	22,000.0 D	400.0 U	300.0 U	800.0 U	2,100.0 U
RB-1																		
	07/01/1998	water	1 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.6 B	0.6 U	0.4 U	3.5 U	0.2 JB	0.4 U	6.0	0.8 U	2.1 U
AB-1																		
	12/24/1997	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	1.0 B	0.6 U	0.4 U	3.5 U	1.2 U	0.4 U	0.3 U	0.8 U	2.1 U
	04/27/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.6 B	0.6 U	0.4 U	3.5 U	0.2 F	0.4 U	0.3 U	0.8 U	2.1 U
	07/01/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.6 B	0.6 U	0.4 U	3.5 U	0.2 JB	0.4 U	7.0	0.8 U	2.1 U
TB-1																		
	12/24/1997	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.9 B	0.6 U	0.4 U	3.5 U	1.2 U	0.4 U	0.3 U	0.8 U	2.1 U
	04/27/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	3.0 B	0.6 U	0.4 U	3.5 U	0.1 F	0.4 U	0.3 U	0.8 U	2.1 U
(WP021)	07/01/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	1.0 B	6.0 U	0.4 U	3.5 U	0.4 JB	0.4 U	2.0	0.8 U	2.1 U
	07/01/1998	water	1.0 U	1.3 U	1.1 U	1.1 U	1.0 U	0.8 U	1.2 U	0.9 B	0.6 U	0.4 U	3.5 U	0.2 JB	0.4 U	2.4	0.8 U	2.1 U

Notes:

U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.

D - The compound was found in an analysis at at a secondary dilution factor.

F - The analyte was positively identified but the associted numerical value is below the reporting limit.

E - Concentration exceeded the calibration range of the instrument.

B- The analyte was found in the associted blank, as well as in the sample.

! - Value was obtained from a 1:25,000 dilution

& - Value was obtained from a 1:1000 dilution.

NA - The analyte was not analyzed for this compound.

TB - Trip Blank

AB - Ambient Blank

EB - Equipment Blank

NS - No sample

All units are ug/kg or ug/l (ppb).

KELLY AIR FORCE BASE
VOC GROUNDWATER RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	1,1-Di Chloro propene	Benzene	-1,2-Di chloro-ethane	Tri-chloro-ethene	1,2-Di-chloro-propane	Dibromo-methane	Bromo-dichloro-methane	Cis-1,3-dichloro-propene	Toluene	Trans-1,3-dichloro-propene	1,1,2-Tri chloro-ethane	1-Chloro-hexane	Tetra-chloro-ethene	1,3,-Di-chloro-propane	Dibromo-chloro-methane
MW-107																	
	12/24/1997	water	1.0 U	55.5	0.6 U U	9,450.0 D!	0.4 U	2.4 U	0.8 U	1.0 U	26.1	1.0 U	13.5	0.5 U	4.5	0.4 U	0.5 U
	04/27/1998	water	1.0 U	51.0	0.6 U U	1,800.0	0.4 U	2.4 U	0.8 U	1.0 U	1.1 F	1.0 U	9.0	0.5 U	1.1 F	0.4 U	0.5 U
	07/01/1998	water	1.0 U	35.2	0.6 U	4,600.0 D	0.4 U	2.4 U	0.8 U	1.0 U	7.7	1.0 U	13.2	0.5 U	1.9	0.4 U	0.5 U
	09/15/1998	water	1.0 U	25.0	0.6 U	1,300.0 E	0.4 U	2.4 U	0.8 U	1.0 U	6.0	1.0 U	12.0	0.5 U	0.6 J	0.4 U	0.5 U
	05/11/1999	water	500.0 U	200.0 U	300.0 U	10,400.0 E	200.0 U	1,200.0 U	400.0 U	500.0 U	550.0 U	500.0 U	500.0 U	250.0 U	700.0 U	450.0 U	250.0 U
MW-119																	
	12/24/1997	water	1.0 U	21	0.6 U U	78.2 E	0.4 U	2.4 U	0.8 U	1.0 U	55.0	1.0 U	5.7	0.5 U	1.4 U	0.4 U	0.5 U
	04/27/1998	water	1.0 U	16.0	0.6 U U	9.0	0.4 U	2.0 U	0.8 U	1.0 U	16.0	1.0 U	6.0	0.5 U	0.3 F	0.4 U	0.5 U
	07/01/1998	water	1.0 U	16.5	6.5	6.9	4.0 U	2.4 U	0.8 U	1.0 U	28.4	1.0 U	4.7	0.5 U	0.2 F	0.4 U	0.5 U
	09/15/1998	water	1.0 U	20.0	0.6 U	12.0	0.4 U	2.4 U	0.8 U	1.0 U	29.0	1.0 U	7.0	0.5 U	1.4 U	0.4 U	0.5 U
	05/10/1999	water	500.0 U	200.0 U	300.0 U	500.0 U	200.0 U	1,200.0 U	400.0 U	500.0 U	550.0 U	500.0 U	500.0 U	250.0 U	700.0 U	450.0 U	250.0 U
MW-120																	
	12/24/1997	water	50.0 U	147.0 D	30.0 U	104,940.0 D!	20.0 U	120.0 U	40.0 U	50.0 U	859.0 D	50.0 U	75.5 D	25.0 U	70.0 U	20.0 U	25.0 U
	04/29/1998	water	1,000.0 U	280.0 FD	600.0 U	110,000.0 B!	400.0 U	2,400.0 U	800.0 U	1,000.0 U	960.0 FD	1,000.0 U	1,000.0 U	500.0 U	1,400.0 U	400.0 U	500.0 U
	07/01/1998	water	0.1 F	150.0 JD	0.6 U	7,600.0 D!	0.4 U	2.4 U	0.8 U	1.0 U	330.0 JD	1.0 U	66.0 E	0.1 J	11.6	0.4 U	0.5 U
	09/15/1998	water	1.0 U	110.0 E	0.6 U	45,000.0 !	0.4 U	2.4 U	0.8 U	1.0 U	280.0 E	1.0 U	85.0 E	0.5 U	5.3	0.4 U	0.5 U
	05/11/1999	water	500.0 U	200.0 U	300.0 U	57,800.0 E	200.0 U	1,200.0 U	400.0 U	500.0 U	550.0 U	500.0 U	500.0 U	250.0 U	700.0 U	450.0 U	250.0 U
MW-121																	
	12/24/1997	water	50.0 U	504.0 D	105.0 D	497,875.0 D!	20.0 U U	120.0 U	40.0 U	50.0 U	5,336.5 ED	50.0 U	551.5 D	25.0 U	80.5 D	20.0 U	25.0 U
	04/29/1998	water	1,000.0 U	550.0 D	600.0 U	57,000.0 B!	400.0 U U	2,400.0 U	800.0 U	1,000.0 U	6,700.0 D	1,000.0 U	680.0 FD	500.0 U	100.0 FD	400.0 U	500.0 U
	07/01/1998	dry	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/15/1998	water	1.0 U	620.0 E	0.6 U	480,000.0 !	0.4 U	2.4 U	0.8 U	1.0 U	3,200.0 E	1.0 U	650.0 E	0.5 U	51.0	0.4 U	0.5 U
	05/11/1999	water	500.0 U	200.0 U	300.0 U	491,000.0 D	200.0 U	1,200.0 U	400.0 U	500.0 U	9,010.0	500.0 U	540.0	250.0 U	700.0 U	450.0 U	250.0 U
MW-122																	
	12/24/1997	water	50.0 U	34.0 D	30.0 U	1,077.0 D!	20.0 U U	120.0 U	40.0 U	50.0 U	176.5 D	50.0 U	50.0 U	25.0 U	70.0 U	20.0 U	25.0 U
	04/27/1998	water	1.0 U	37.0	11.0	3,800.0 B&	0.4 U U	2.4 U	0.8 U	1.0 U	470.0 &	1.0 U	11.0	0.5 U	1.4 F	0.4 U	0.5 U
	07/01/1998	water	1.0 U	17.8	0.6 U	22.5	0.4 U	2.4 U	0.8 U	1.0 U	550.0 E	1.0 U	2.5	0.5 U	1.4 U	0.4 U	0.5 U
	09/21/1998	water	500.0 U	200.0 U	300.0 U	1,825.0 D	200.0 U	1,200.0 U	400.0 U	500.0 U	550.0 U	500.0 U	500.0 U	250.0 U	700.0 U	200.0 U	250.0 U
	05/11/1999	water	5.0 U	46.2	7.0	7.1	2.0 U	12.0 U	4.0 U	5.0 U	3,040.0 D	5.0 U	5.0 U	2.5 U	7.0 U	4.5 U	2.5 U
MW-124																	
	12/24/1997	water	50.0 U	20.0 U	30.0 U	484.0 D!	20.0 U U	120.0 U	40.0 U	50.0 U	85.5 D	50.0 U	50.0 U U	25.0 U	70.0 U	20.0 U	25.0 U
	04/27/1998	water	1.0 U	21.0	10	26.0	0.4 U U	2.4 U	0.8 U	1.0 U	110.0 E	1.0 U	12.9	0.5 U	0.9 F	0.4 U	0.5 U
	07/01/1998	water	1.0 U	11.0	5.5	6.7	0.4 U	2.4 U	0.8 U	1.0 U	12.8	1.0 U	5.7	0.5 U	1.4 U	0.4 U	0.5 U
	09/15/1998	water	1.0 U	16.0	12.0	5.5	0.4 U	2.4 U	0.8 U	1.0 U	130.0 E	1.0 U	12.0	0.5 U	1.4 U	0.4 U	0.5 U
	05/10/1999	water	1.0 U	51.0	15.9	8.2	0.9	2.4 U	0.8 U	1.0 U	305.0 D	4.9	11.5	0.5 U	1.4 U	0.9 U	0.5 U
EB-1																	
	04/27/1998	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
NI																	
	04/27/1998	water	1,000.0 U	400.0 U	600.0 U	460.0 BD	400.0 U U	2,400.0 U	800.0 U	1000 .0 U	1,100.0 U	1,000.0 U	1,000.0 U	500.0 U	1,400.0 U	400.0 U	500.0 U
RB-1																	
	07/01/1998	water	1.0 U	0.4 U	0.6 U	0.2 J	0.4 U	2.4 U	0.5 J	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
AB-1																	
	12/24/1997	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
	04/27/1998	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
			1.0 U	0.4 U	0.6 U	0.3 J	0.4 U	2.4 U	0.6 F	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
TB-1																	
	12/24/1997	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
	04/27/1998	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
(WP021)	07/01/1998	water	1.0 U	0.4 U	0.6 U	0.3 J	0.4 U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U
	07/01/1998	water	1.0 U	0.4 U	0.6 U	1.0 U	0.4 U	2.4 U	0.8 U	1.0 U	1.1 U	1.0 U	1.0 U	0.5 U	1.4 U	0.4 U	0.5 U

Notes:

U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.

D - The compound was found in an analysis at at a secondary dilution factor.

F - The analyte was positively identified but the associted numerical value is below the reporting limit.

E - Concentration exceeded the calibration range of the instrument.

B- The analyte was found in the associted blank, as well as in the sample.

! - Value was obtained from a 1:25,000 dilution

& - Value was obtained from a 1:1000 dilution.

NA - The analyte was not analyzed for this compound.

NS - No sample

KELLY AIR FORCE BASE
VOC GROUNDWATER RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	1,2-Di-bromo-ethane	Chloro-benzene	1,1,1,2-Tetra chloro ethane	Ethyl-benzene	m,p-xylene	o-xylene	Styrene	Bromoform	Isopropyl-benzene	Bromo-benzene	1,1,2,2-Tetrachloro ethane	1,2,3-Tri chloro propane	N-propyl-benzene	2-Chloro-toluene
MW-007																
	12/24/1997	water	0.6 U	59.3	0.5 U	1.1	8.1	3.6	0.4 U	1.2 U	4.3	0.3 U	0.4 U	3.2 U	0.7	0.4 U
	04/27/1998	water	0.6 U	50.0	0.5 U	0.8	4.0	2.0	0.4 U	1.2 U	3.0	0.3 U	0.4 U	3.2 U	0.4	0.4 U
	07/01/1998	water	0.6 U	40.1	0.5 U	0.6 F	1.5	0.7 J	0.4 U	1.2 U	1.1	0.3 U	0.4 U	3.2 U	0.2 J	0.4 U
	09/15/1998	water	0.6 U	23.0	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
	05/11/1999	water	300.0 u	11,800.0 D	250.0 U	300.0 U	650.0 U	550.0 U	200.0 U	600.0 U	250.0 U	150.0 U	200.0 U	1,600.0 U	200.0 U	200.0 U
MW-119																
	12/24/1997	water	0.6 U	189.9 E	0.5 U	31.2	28.6	14.2	0.4 U	1.2 U	11.3	0.3 U	0.4 U	3.2 U	8.8	0.4 U
	04/27/1998	water	0.6 U	180.0 E	0.5 U	25.0	10.0	13.0	0.4 U	1.2 U	8.0	0.3 U	0.4 U	3.2 U	7.0	0.4 U
	07/01/1998	water	0.6 U	210.0 D	0.5 U	23.1	11.7	11.9	0.4 U	1.2 U	6.7	0.3 U	0.4 U	3.2 U	4.7	0.4 U
	09/15/1998	water	0.6 U	200.0 E	0.5 U	16.0	6.0	11.0	0.4 U	1.2 U	6.6	0.3 U	0.4 U	3.2 U	3.6	0.4 U
	05/10/1999	water	300.0 u	985.0	250.0 u	300.0 U	650.0 U	550.0 U	200.0 U	600.0 U	250.0 U	150.0 U	200.0 U	1,600.0 U	200.0 U	200.0 U
MW-120																
	12/24/1997	water	30.0 U	150.5 D	25.0 U	109.0 D	124.0 D	77.0 D	20.0 U	60.0 U	25.0 U	15.0 U	20.0 U	160.0 U	25.5 D	20.0 U
	04/29/1998	water	600.0 U	400.0 U	500.0 U	150.0 FD	230.0 FD	1,100.0 U	400.0 U	1,200.0 U	500.0 U	300.0 U	400.0 U	3,200.0 U	400.0 U	400.0 U
	07/01/1998	water	0.6 U	37.6	0.5 U	48.9	66.8	10.1	38.4	1.2 U	7.6	0.2 F	0.4 U	3.2 U	8.0	0.4 U
	09/15/1998	water	0.6 U	40.0	0.5 U	41.0	23.0	8.8	17.0	1.2 U	4.5	0.3 U	0.4 U	3.2 U	4.9	0.4 U
	05/11/1999	water	300.0 U	200.0 U	250.0 U	300.0 U	650.0 U	550.0 U	200.0 U	600.0 U	250.0 U	150.0 U	200.0 U	1,600.0 U	200.0 U	200.0 U
MW-121																
	12/24/1997	water	30.0 U	28.5 D	2,750.0 U	104.5 D	448.0 D	217.0 D	20.0 U	60.0 U	25.0 U	15.0 U	20.0 U	160.0 U	34.0 D	20.0 U
	04/29/1998	water	600.0 U	400.0 U	500.0 U	130.0 FD	570.0 FD	260.0 FD	400.0 U	1,200.0 U	500.0 U	300.0 U	400.0 U	3,200.0 U	400.0 U	400.0 U
	07/01/1998	dry	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/15/1998	water	0.6 U	12.0	0.5 U	73.0 E	160.0 E	170.0 E	0.4 U	1.2 U	20.0	0.3 U	0.8 U	3.2 U	31.0	0.4 U
	05/11/1999	water	300.0 u	200.0 U	250.0 U	300.0 U	650.0 U	550.0 U	200.0 U	600.0 U	250.0 U	150.0 U	200.0 U	1,600.0 U	200.0 U	200.0 U
MW-122																
	12/24/1997	water	30.0 U	369.5 D	25.0 U	21.5 FD	18.5 FD	55.0 U	20.0 U	60.0 U	25.0 U	15.0 U	20.0 U	160.0 U	20.0 U	20.0 U
	04/27/1998	water	0.6 U	650.0 &	0.5 U	31.0	26	10.0	0.4 U	1.2 U	28	0.3 U	0.4 U	3.2 U	0.4 U	4.0
	07/01/1998	water	0.6 U	220.0 D	0.5 U	10.0	4.7	3.1	0.4 U	1.2 U	12.0	0.3 U	0.4 U	3.2 U	6.4	0.4 U
	09/21/1998	water	300.0 U	200.0 U	250.0 U	300.0 U	650.0 U	550.0 U	200.0 U	600.0 U	250.0 U	150.0 U	200.0 U	1,600.0 U	200.0 U	200.0 U
	05/11/1999	water	3.0 U	6,000.0 D	2.5 U	44.2	33.7	10.8	2.0 U	6.0 U	24.0	1.5 U	2.0 U	16.0 U	27.8	3.2
MW-124																
	12/24/1997	water	30.0 U	512.5 D	25.0 U	78.0 D	44.0 FD	47.5 FD	20.0 U	60.0 U	25.0 U	15.0 U	20.0 U	160.0 U	20.0 U	20.0 U
	04/27/1998	water	0.6 U	500.0 &	0.5 U	34.0	23.0	23.0	0.4 U	1.2 U	14	0.3 U	0.4 U	3.2 U	9.0	0.4 U
	07/01/1998	water	0.6 U	320.0 D	0.5 U	13.1	6.2	11.2	0.4 U	1.2 U	7.2	0.1 F	0.4 U	3.2 U	1.2	0.4
	09/15/1998	water	0.6 U	470.0 E	0.5 U	24.0	13.0	23.0	0.4 U	1.2 U	12.0	0.3 U	0.4 U	3.2 U	8.1	0.4 U
	05/10/1999	water	0.6 U	591.0 D	0.5 U	159.0	55.8	83.5	2.7	1.2 U	35.8	0.3 U	1.2	3.2 U	44.6	4.7
EB-1																
	04/27/1998	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
NI																
	04/27/1998	water	600.0 U	500.0 D	500.0 U	600.0 U	1,300.0 U	1,100.0 U	400.0 U	1,200.0 U	500.0 U	300.0 U	400.0 U	3,200.0 U	400.0 U	400.0 U
RB-1																
			0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
AB-1																
	12/24/1997	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
	04/27/1998	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
			0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
TB-1																
	12/24/1997	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
	04/27/1998	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
(WP021)	07/01/1998	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U
	07/01/1998	water	0.6 U	0.4 U	0.5 U	0.6 U	1.3 U	1.1 U	0.4 U	1.2 U	0.5 U	0.3 U	0.4 U	3.2 U	0.4 U	0.4 U

Notes:

U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.

D - The compound was found in an analysis at at a secondary dilution factor.

F - The analyte was positively identified but the associted numerical value is below the reporting limit.

E - Concentration exceeded the calibration range of the instrument.

B- The analyte was found in the associted blank, as well as in the sample.

! - Value was obtained from a 1:25,000 dilution

& - Value was obtained from a 1:1000 dilution.

NA - The analyte was not analyzed for this compound.

NS - No sample

KELLY AIR FORCE BASE
VOC GROUNDWATER RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	4-Chloro-toluene	1,3,5-Tri-methyl-benzene	Tert-butyl benzene	1,2,4-Tri-methyl-benzene	Sec-butyl benzene	1,3-Di-chloro-benzene	4-Isoproyl-toluene	1,4-Di-chloro-benzene	1,2-Di-chloro-benzene	n-Butyl-benzene	1,2-Di-bromo-3-chloropropane	1,2,4-Tri-chloro-benzene	Hexa-chloro-butadiene	Naphtha-lene	1,2,3-Tri-chloro-benzene	Total VOCS
MW-007																		
	12/24/1998	water	0.6 U	0.6	1.4	1.3 F	2.1	20.9	1.4	44.2	68.9 E	1.4	2.6 U	0.9	1.1 U	2.0	0.7	140,455.3
	04/27/1998	water	0.6 U	1.0	0.8 F	1.3 U	2.0	21.0	1.2 U	45.0	130.0 B&	1.1 U	2.6 U	0.9	1.1 U	2.0	0.4	107,974.5
	07/01/1998	water	0.6 U	0.2 F	1.4 U	1.3 U	1.3 U	10.8	1.2 U	19.9	25.1	1.1 U	2.6 U	0.4 U	1.1 U	2.6	0.2 FB	69,925.5
	09/15/1998	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U	4.0	1.2 U	7.0	11.0	1.1 U	2.6 U	0.4 U	1.1 U	0.8	0.3 U	32,031.1
	05/11/1999	Water	300.0 u	250.0 U	700.0 U	650.0 U	650.0 U	600.0 U	600.0 U	150.0 U	3,350.0 D	550.0 U	1,300.0 U	200.0 U	550.0 U	1,000.0 U	150.0 U	204,615.0
MW-119																		
	12/24/1998	water	0.6 U	22.2	1.4 U	59.0	16.0	43.9	16.4	117.5 E	310.0 D!	1.1 U	2.6 U	0.4 U	1.1 U	19.2	0.3 U	19,103.0
	04/27/1998	water	0.6 U	9.2	1.4 U	12.0	11.0	38.0	1.2 U	100.0 E	370.0 B&	1.1 U	3.0 U	0.4 U	1.1 U	4.0	0.3 U	23,075.5
	07/01/1998	water	0.6 U	10.0	1.4 U	25.0	6.5	23.9	1.2 U	63.3 E	220.0 BD	1.1 U	2.6 U	0.4 U	1.1 U	10.8	0.3 U	11,162.4
	09/15/1998	water	0.6 U	8.7	1.4 U	21.0	1.3 U	38.0	1.2 U	120.0	310.0	1.1 U	2.6 U	0.4 U	1.1 U	5.8	0.3 U	27,574.5
	05/10/1999	water	300.0 U	250.0 U	700.0 U	650.0 U	650.0 U	600.0 U	600.0 U	360.0	675.0	550.0 U	1,300.0 U	200.0 U	550.0 U	1,000.0 U	150.0 U	62,520.0
MW-120																		
	12/24/1998	water	30.0 U	64.5 D	70.0 U	99.0 D	65.0 U U	64.0 D D	60.0 U	145.5 D	400.5 D	55.0 U	130.0 U	20.0 U	55.0 U	80.0 D	15.0 U	449,810.0
	04/29/1998	water	600.0 U	500.0 U	1,400.0 U	230.0 FD	1,300.0 U	1200.0 U U	1,200.0 U	300.0 U	440.0 BD	1,100.0 U	2,600.0 U	400.0 U	1,100.0 U	400.0 U	300.0 U	464,380.0
	07/01/1998	water	0.6 U	33.2	1.4 U	72.1 E	4.3	25.9	13.1	50.7	260.0 BD	11.2	2.6 U	0.4 U	0.1 F	115.6 E	0.3 U	39,385.7
	09/15/1998	water	0.6 U	20.0	1.4 U	43.0	1.3 U	19.0	1.2 U	40.0	120.0 E	1.1 U	2.6 U	0.4 U	1.1 U	73.0 E	0.3 U	328,854.5
	05/11/1999	water	300.0 U	250.0 U	700.0 U	650.0 U	650.0 U	600.0 U	600.0 U	150.0 U	165.0	550.0 U	1,300.0 U	200.0 U	550.0 U	1,000.0 U	150.0 U	494,015.0
MW-121																		
	12/24/1998	water	30.0 U	106.5 D	70.0 U	303.5 D	65.0 U	54.5 FD	46.5 FD	112.5 D	351.0 D	55.0 U	130.0 U	20.0 U	55.0 U	221.0 D	15.0 U	556,882.0
	04/29/1998	water	600.0 U	150.0 FD	1,400.0 U	430.0 FD	1,300.0 U	1,200.0 U	1,200.0 U	300.0 U	530.0 BD	1,100.0 U	2,600.0 U	400.0 U	1,100.0 U	400.0 U	300.0 U	117,580.0
	07/01/1998	dry	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	09/15/1998	water	0.6 U	110.0 E	1.4 U	290.0 E	1.3 U	36.0	49.0	77.0 E	270.0 E	1.1 U	2.6 U	0.4 U	1.1 U	290.0 E	0.3 U	566,639.0
	05/11/1999	water	300.0 U	350.0 U	700.0 U	650.0 U	650.0 U	600.0 U	600.0 U	150.0 U	210.0	550.0 U	1,300.0 U	200.0 U	550.0 U	1,000.0 U	150.0 U	617,455.0
MW-122																		
	12/24/1997	water	30.0 U	21.0 FD	70.0 U	65.0 U	65.0 U	63.0 D	60.0 U	164.0 U	438.5 U	55.0 U	130.0 U	20.0 U	55.0 U	20.0 U	15.0 U	29,129.0
	04/27/1998	water	5.0	44.0	1.4 U	270.0 &	25.0	1.2 U	1.2 U	0.3 U	940.0 B&	1.1 U	2.6 U	2.0	1.1 U	38.0	1.0 B	56,655.4
	07/01/1998	water	0.6 U	1.5	5.2	3.1	10.8	30.2	1.2 U	90.0 FD	300.0 BD	1.1 U	2.6 U	1.0	1.1 U	3.2	0.9 B	23,274.2
	09/21/1998	water	300.0 U	250.0 U	700.0 U	650.0 U	650.0 U	600.0 U	600.0 U	150.0 U	150.0 U	550.0 U	1,300.0 U	200.0 U	550.0 U	200.0 U	150.0 U	33,210.0
	05/11/1999	water	3.0 U	47.8	11.6	170.0	21.0	62.3	6.0 U	460.0 D	2,920.0 D	9.2	13.0 U	2.0 U	5.5 U	29.0	1.5 U	273,741.7
MW-124																		
	12/24/1997	water	30.0 U	25.0 U	70.0 U	107.0 D	65.0 U	81.5 D	60.0 U	311.5 D	906.0 D	55.0 U	130.0 U	20.0 U	55.0 U	26.5 D	15.0 U	40,515.5
	04/27/1998	water	0.6 U	19	1.4 U	62.0 E	14.0	58	1.2 U	270.0 &	770.0 B&	1.1 U	2.6 U	2.0	1.1 U	35.0	0.3 U	10,853.8
	07/01/1998	water	0.6 U	1.3	3.7	3.9	6.7	26.2	1.2 U	95.2 E	400.0 BD	1.1 U	2.6 U	1.0	1.1 U	6.2	0.6 B	7,447.3
	09/15/1998	water	0.6 U	22.0	1.4 U	68.0 E	1.3 U	47.0	1.2 U	190.0 E	410.0 E	1.1 U	2.6 U	1.0	1.1 U	33.0	0.7	30,261.3
	510/99	water	0.6 U	47.9	14.4	85.6	24.1	100.0	2.8	47.0 D	301.0 D	10.7	2.6 U	1.6	1.1 U	47.8	1.2	30,504.7
EB-1																		
	04/27/1998	water	0.6 U	0.5 U	1.4 U	1.3	1.3 U U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.4 U	1.1 U	0.4 U	0.3 U	0.6
NI																		
	04/27/1998	water	600.0 U	500.0 U	1,400.0 U	1,300.0 U	1300.0 U U	1,200.0 U	1,200.0 U	280.0 FD	740.0 BD	1,100.0 U	2,600.0 U	400.0 U	1,100.0 U	400.0 U	300.0 U	30,980.0
RB-1																		
			0.6 U	0.5 U	1.4 U	1.3 U	1.3 U	0.1 JB	1.2 U	0.3 U	0.2 JB	1.1 U	2.6 U	0.3 JB	1.1 U	0.4	0.4 B	10.0
AB-1																		
	12/24/1997	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.4 U	1.1 U	0.4 U	0.3 U	1.0
	04/27/1998	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.4 U	1.1 U	0.4 U	0.3 U	0.8
			0.6 U	0.5 U	1.4 U	1.3 U	1.3	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.4 U	1.1 U	0.4 U	0.1 FB	8.8
TB-1																		
	12/24/1997	water	0.6 U	0.5 U	1.4 U U	1.3 U	1.3 U U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.4 U	1.1 U	0.4 U	0.3 U	0.9
	04/27/1998	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.1 F	1.1 U	0.4 U	0.3 U	3.2
(WP021)	07/01/1998	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U	1.2 U	1.2 U	0.3 U	0.3 U	1.1 U	2.6 U	0.3 JB	1.1 U	0.4 U	0.6 B	4.6
	07/01/1998	water	0.6 U	0.5 U	1.4 U	1.3 U	1.3 U	1.2 U	1.2 U	0.3 U	0.1 JB	1.1 U	2.6 U	0.2 JB	1.1 U	0.3 J	0.3 B	4.4

Notes:

U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.

D - The compound was found in an analysis at at a secondary dilution factor.

F - The analyte was positively identified but the associted numerical value is below the reporting limit.

E - Concentration exceeded the calibration range of the instrument.

B- The analyte was found in the associted blank, as well as in the sample.

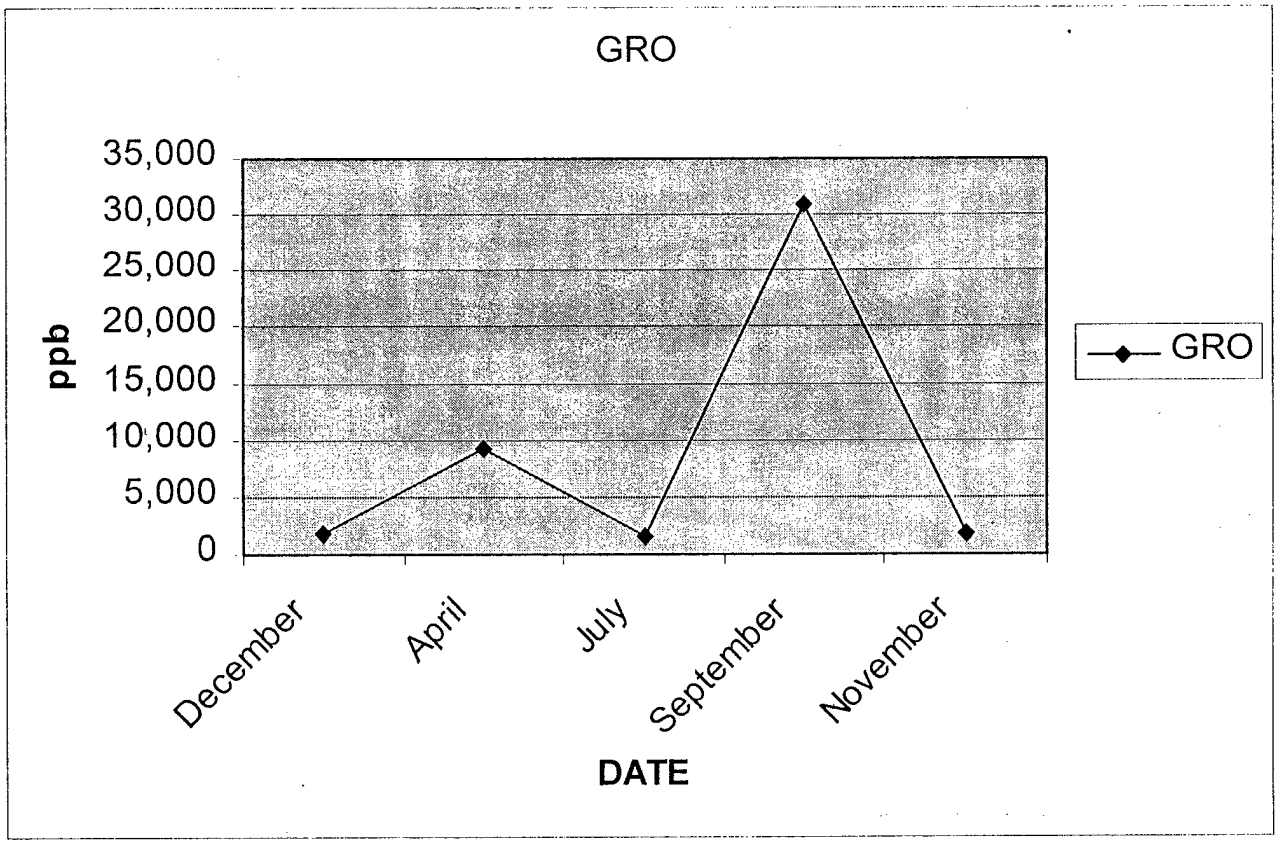
! - Value was obtained from a 1:25,000 dilution

& - Value was obtained from a 1:1000 dilution.

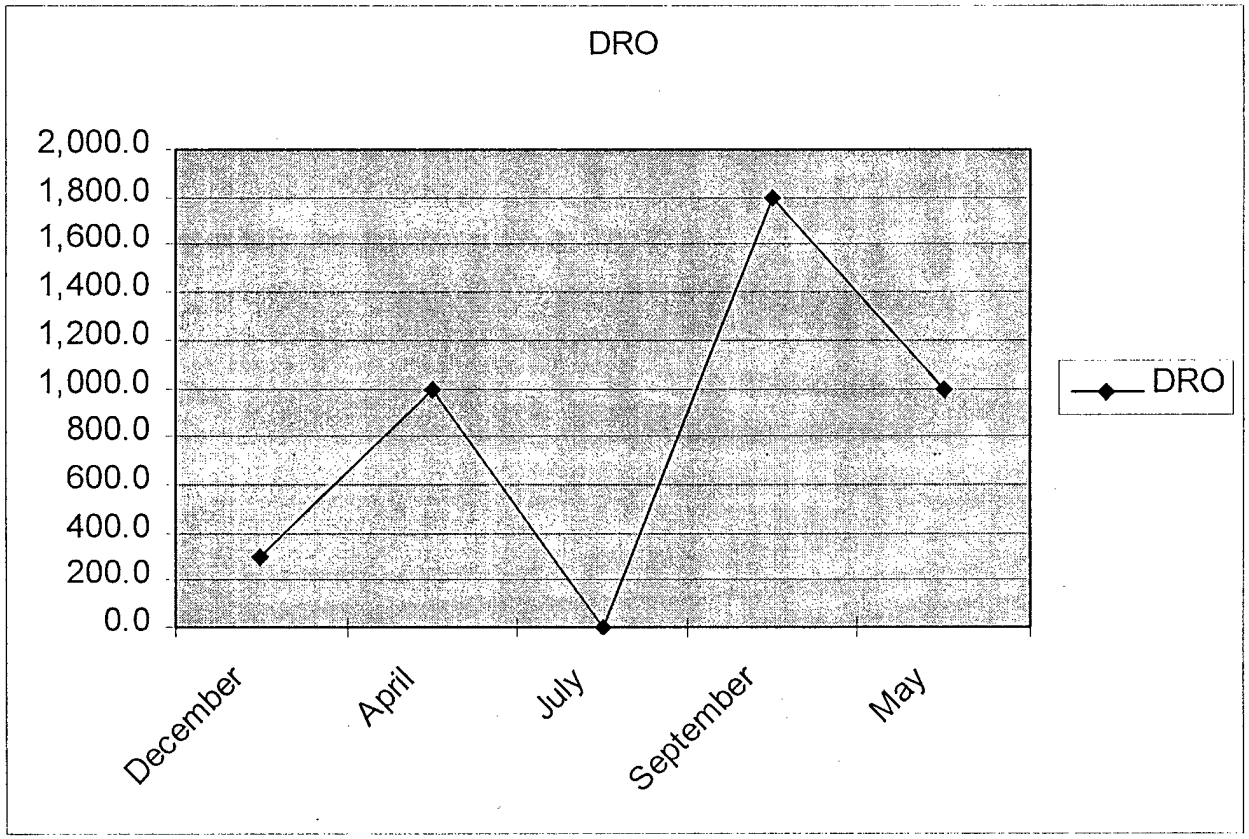
NA - The analyte was not analyzed for this compound.

NS - No sample

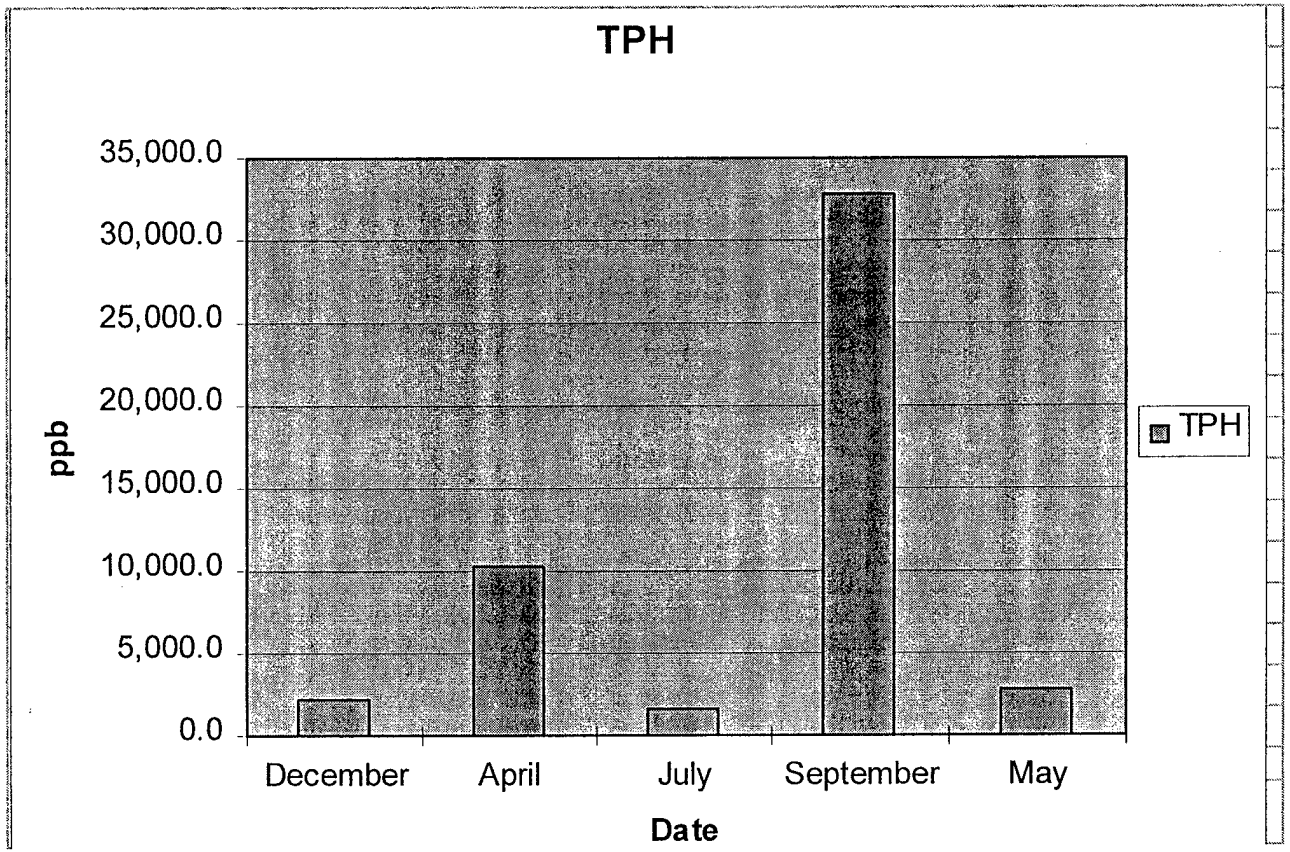
MW-007 GRO GROUNDWATER



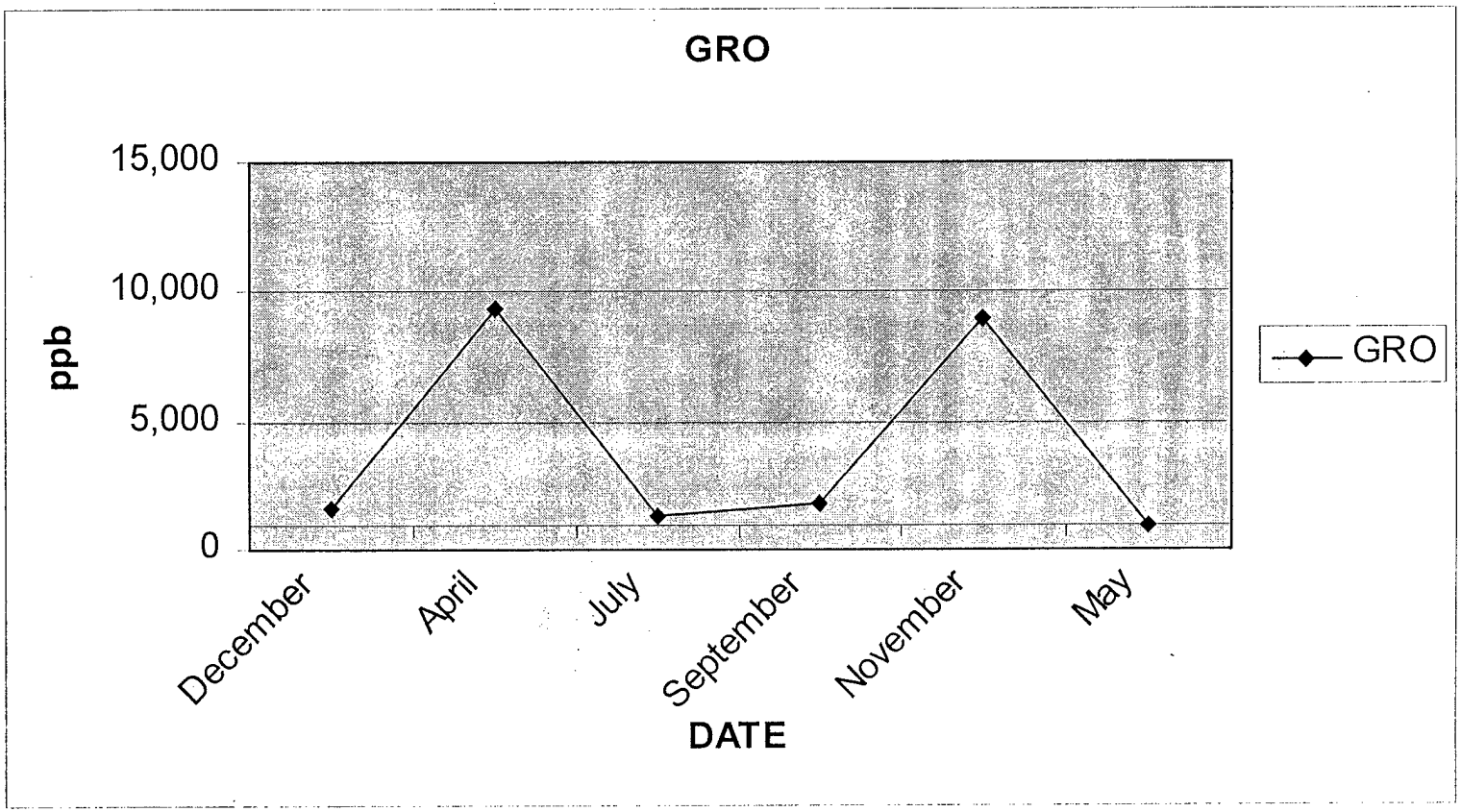
MW-007 DRO GROUNDWATER



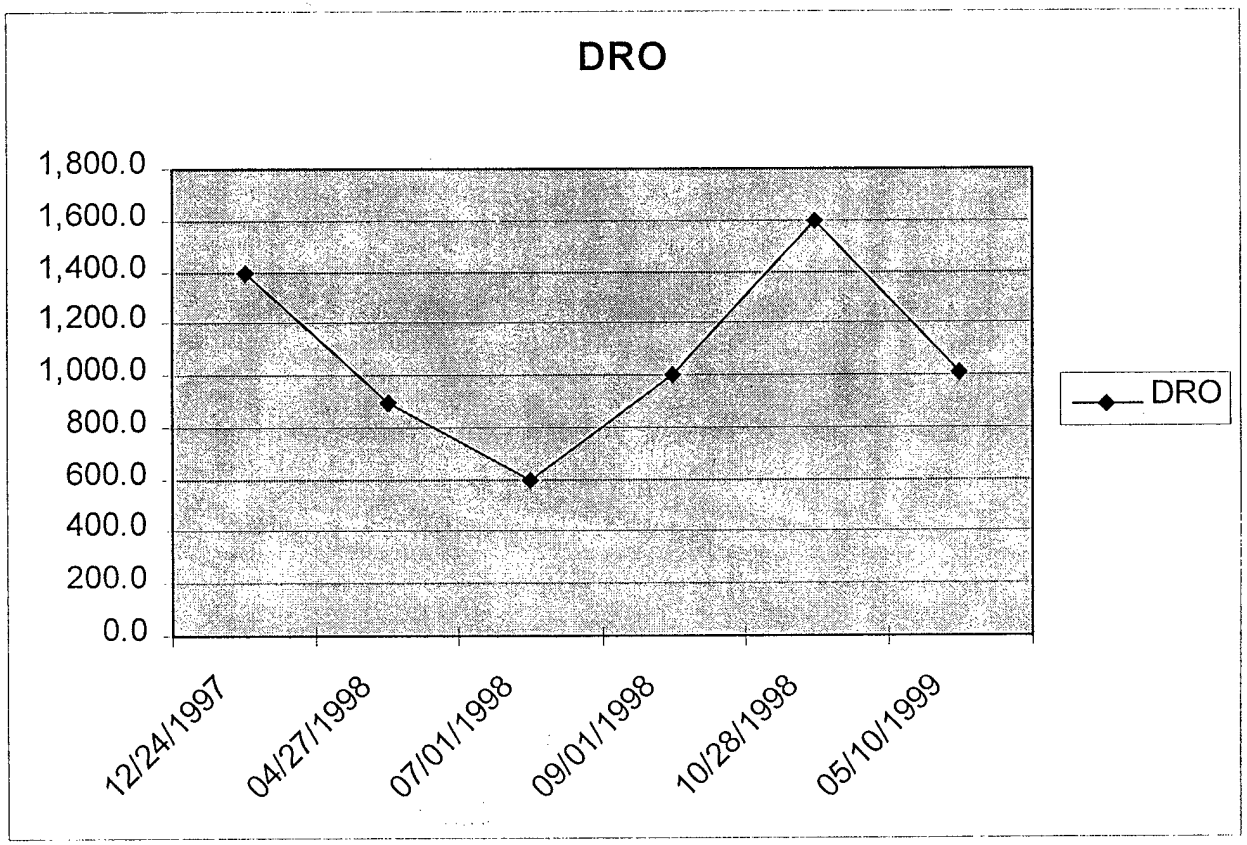
MW-007 TPH GROUNDWATER



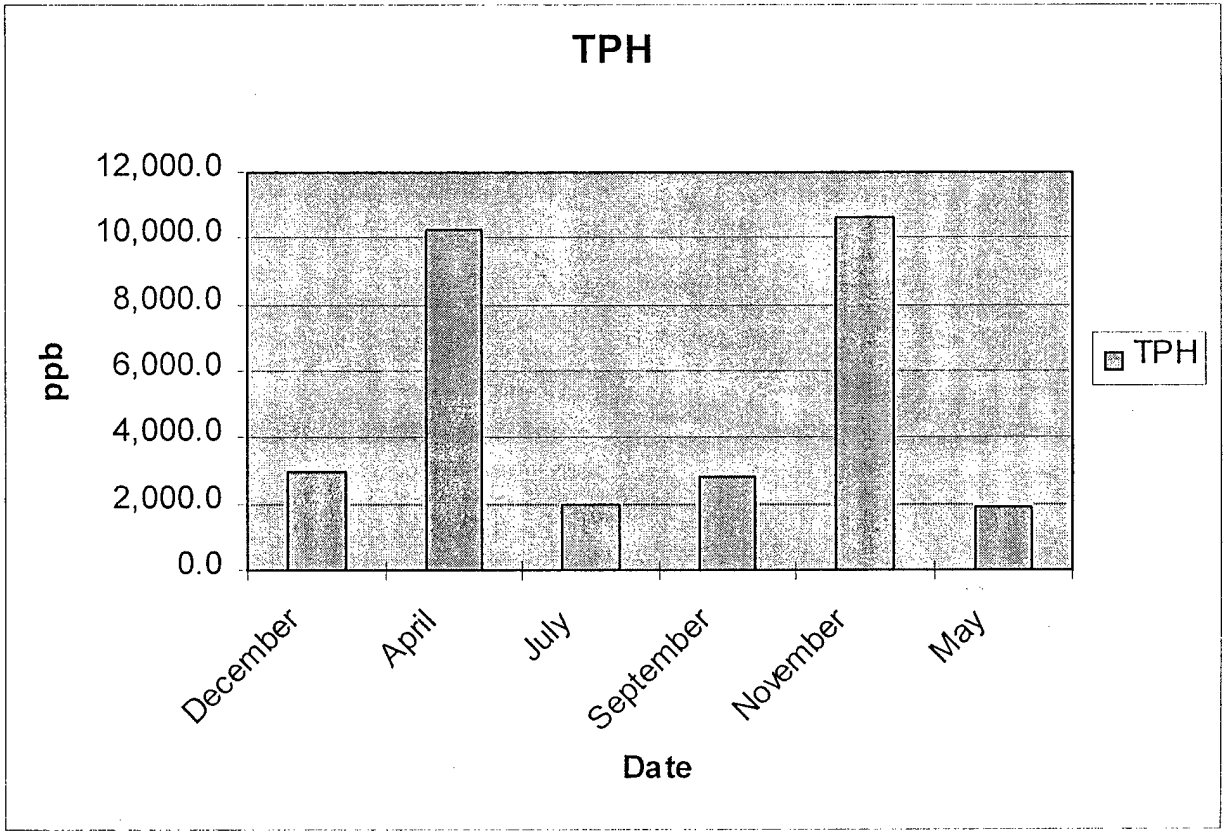
MW-119 GRO GROUNDWATER



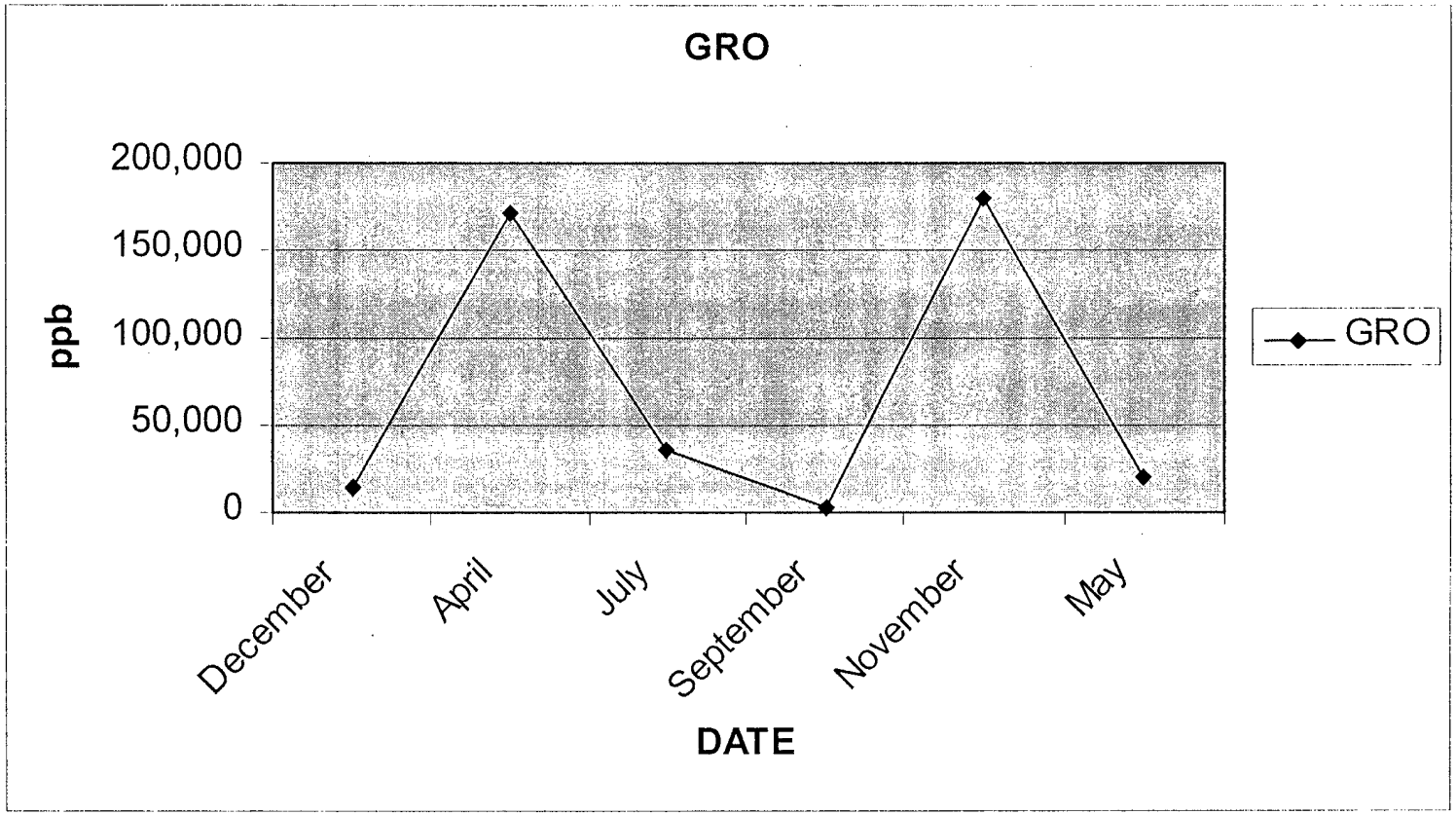
MW-119 DRO GROUNDWATER



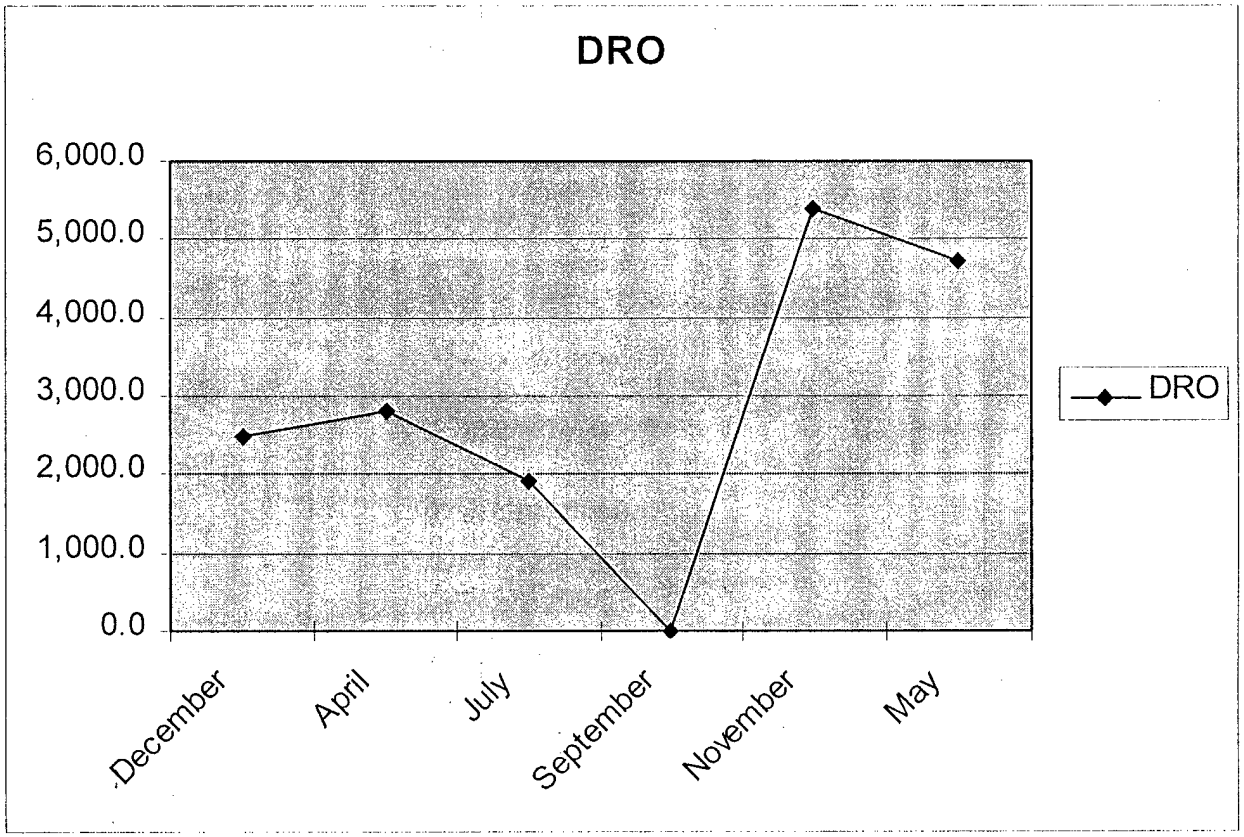
MW-119 TPH GROUNDWATER



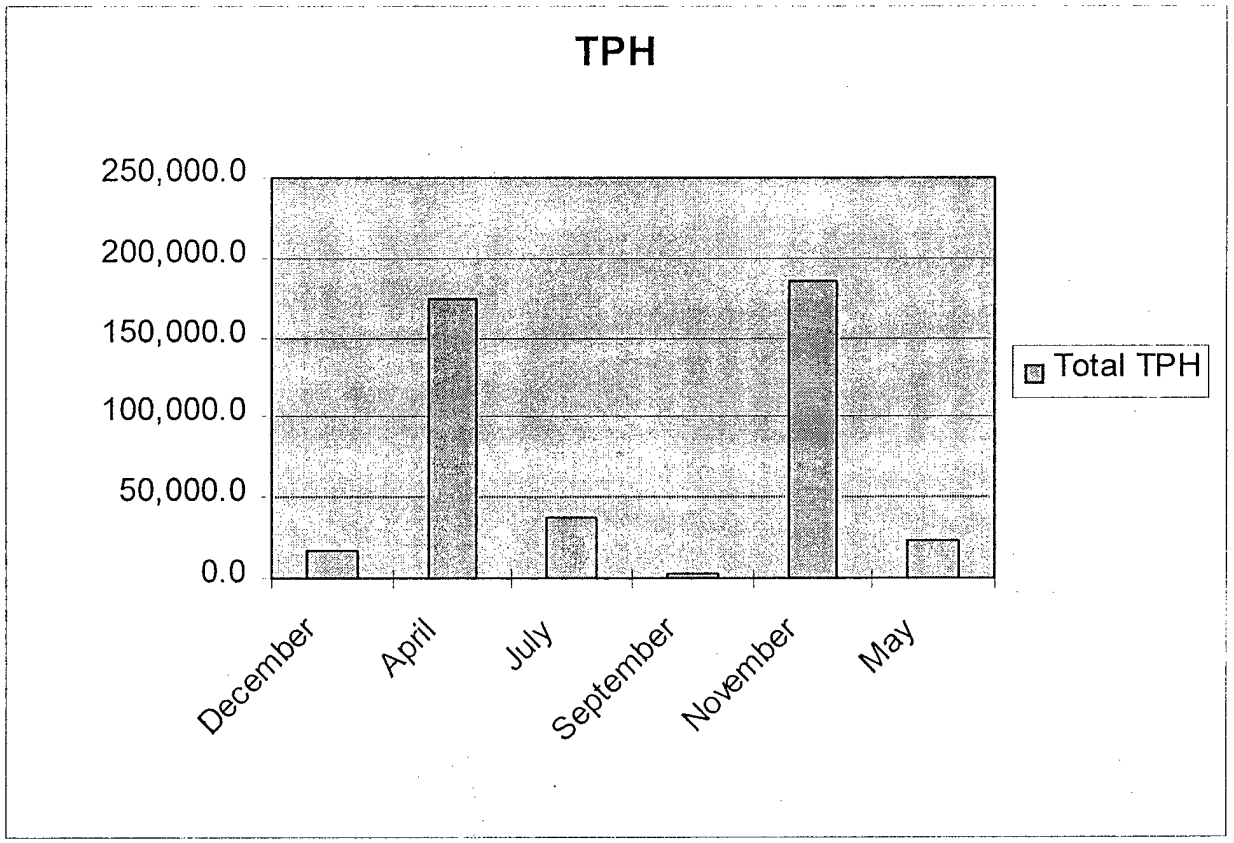
MW-120 GRO GROUNDWATER



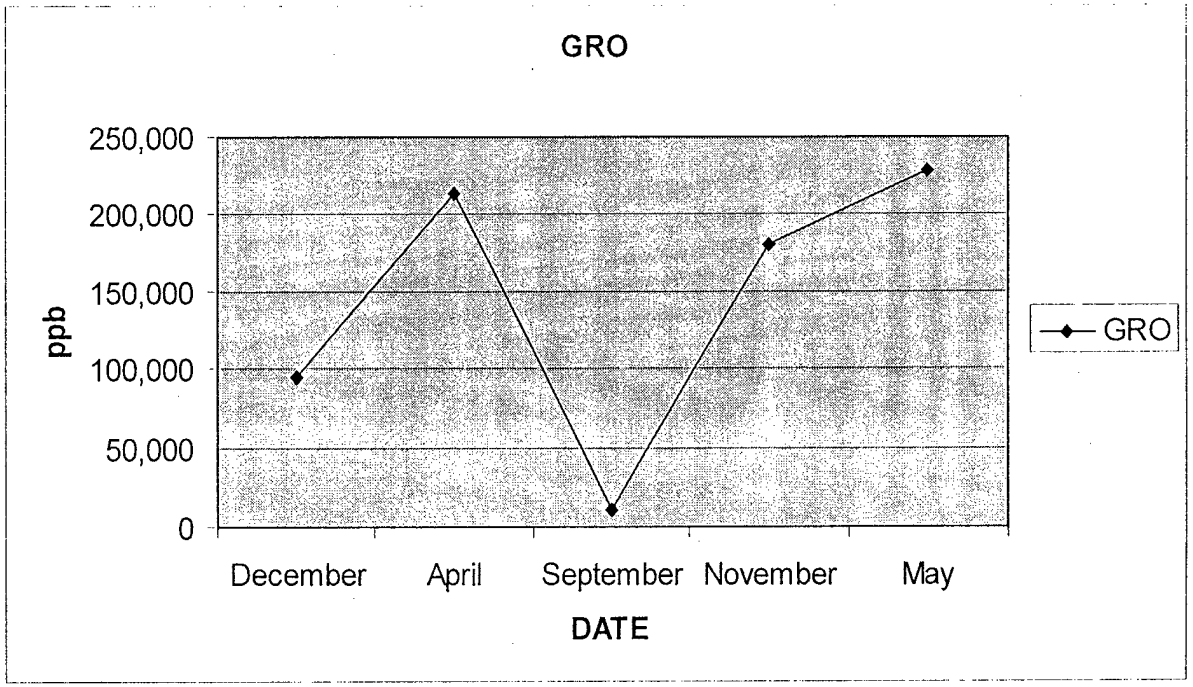
MW-120 DRO GROUNDWATER



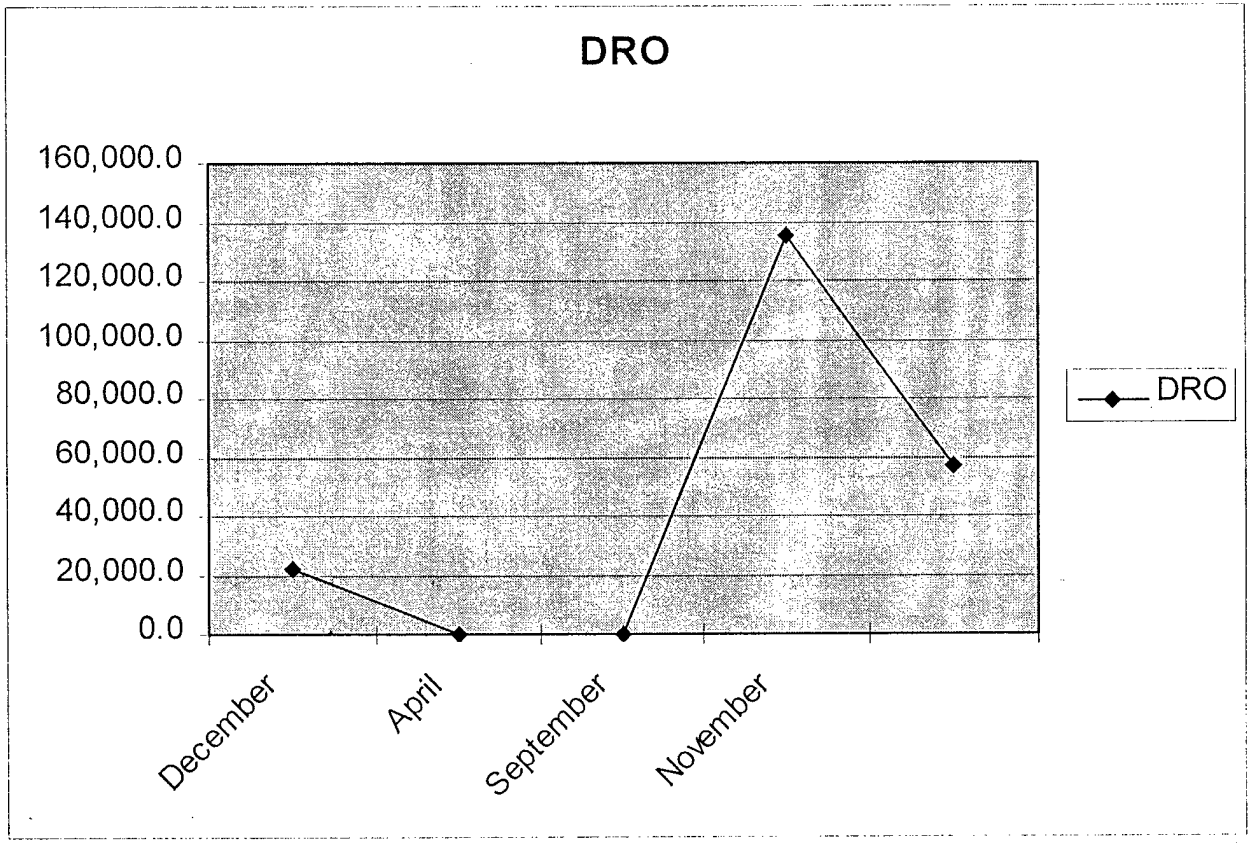
MW-120 TPH GROUNDWATER



MW-121 GRO GROUNDWATER



MW-121 DRO GROUNDWATER



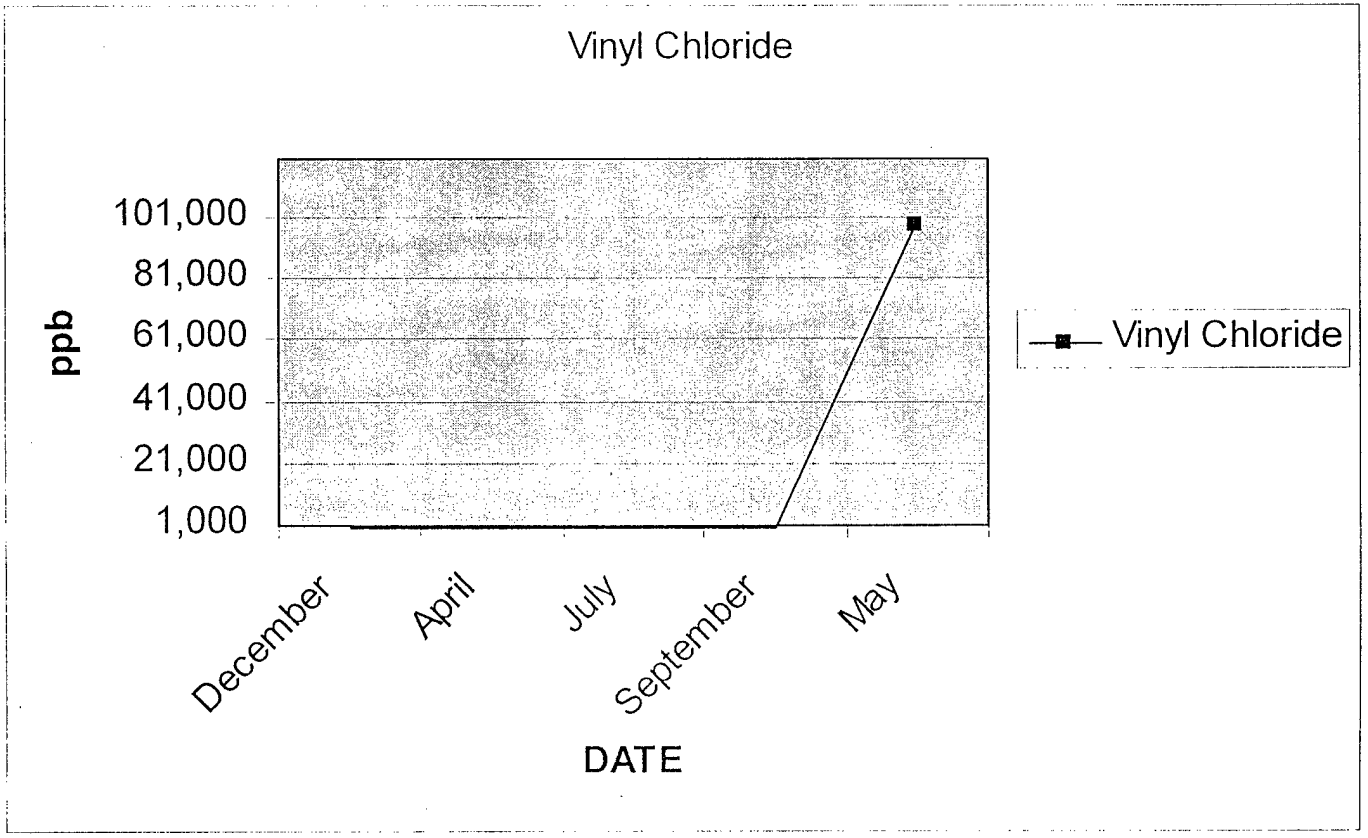
Kelly AFB E-1 Site
Target VOC Analytes
Groundwater

ample ID	Date Analyzed:	Matrix Soil or Water	Vinyl Chloride	1,1 Di-chloro-ethene	Methylene chloride	1,1 Di-chloro-ethane	Cis-1,2 Di-chloro-ethene	Tri-chloro-ethene	Toluene	Chloro-benzene	1,2-Di-chloro-benzene	Total VOCS
MW-007												
	12/24/1997	water	6,600 DI	289.8 E	3 B	584	123,000	9,450	26	59	69	140,455
	04/27/1998	water	3,600	190.0 &	5 B	840	101,000	1,800	1	50	130	107,975
	07/01/1998	water	1,400 D	71.5 E	3	510	63,000	4,600	8	40	25	69,926
	09/15/1998	water	540 E	41	1	250	18,000	1,300	6	23	11	32,031
	10/28/1998	water	15,000	0	2,200		68,000	0				85,200
	05/11/1999	water	98,600 D	0	U	465	80,000	10,400		11,800	3,350	204,615
MW-119												
	12/24/1997	water	2,924 E	84.3 E	U	111	14,890	78	55.0	190	310	19,103
	04/27/1998	water	5,560 &	51.0	U	88	16,500	9	16	180	370	23,076
	07/01/1998	water	8,900 D	44.1	U	100	1,400	7	28	210	220	11,162
	09/15/1998	water	7,600 $	57	U	72	19,000	12	29	200	310	27,575
	10/28/1998	water	5,700	0	710		16,000	0				22,410
	05/10/1999	water	40,000 D	0			20,500	0		985	675	62,520
MW-120												
	12/24/1997	water	6,958 DI	536.5 D	118 BD	474	333,795	104,940	859	151	401	449,810
	04/29/1998	water	8,690 D	890 FD	950 BD	740	340,000	110,000	960		440	464,380
	07/01/1998	water	7,600 D	640 FD	16	390	22,000	7,600	330	38	260	39,386
	09/15/1998	water	2,200 E	230 E	U	300	280,000	45,000	280	40	120	328,855
	10/28/1998	water		0	8,500		250,000	52,000				310,500
	05/11/1999	water	35,900 E	2,660	U	1,140	394,000	57,800			165	494,015
MW-121												
	12/24/1997	water	966 D	2,826 D	1,125 BD	799	43,625	497,875	5,337	29	351	556,882
	04/29/1998	water	1,600 D	3,400 D	2,100 BD	900	42,000	57,000	6,700		530	117,580
	09/15/1998	water	1,700 E	1,800 E	660 E	990	75,000	480,000	3,200	12	270	566,639
	10/28/1998	water	2,200	3,000	4,400	1,300	46,000	430,000	5,700			492,600
	05/11/1999	water	12,000 E	5,780	1,960	2,120	94,000	491,000	9,010		210	617,455
MW-122												
	12/24/1997	water	5,560 D	139.5 D	107 BD	156	21,320	1,077	177	370		29,129
	04/27/1998	water	7,780 &	150.0 &	5 B	210	42,000	3,800	470	650	940	56,655
	07/01/1998	water	6,800 D	49.5	0	100	15,000	23	550	220	300	23,274
	09/21/1998	water	5,080 D	0			26,305	1,825				33,210
	10/28/1998	water	4,900	0	790		16,000	0		550	690	22,930
	05/11/1999	water	159,000 D	98	4	152	101,000	7	3,040	6,000	2,920	273,742
MW-124												
	12/24/1997	water	7,710 D	U	111 BD	132	29,770	484	86	513	906	40,516
	04/27/1998	water	6,400 &	72.0 E	U	86	2,200	26	110	500	770	10,854
	07/01/1998	water	5,400 D	31.3	U	43	1,000	7	13	320	400	7,447
	09/15/1998	water	6,600 $	59	U	61	22,000	6	130	470	410	30,261
	10/28/1998	water	4,900		1,100		38,000	0				44,000
	05/11/1999	water	18,100 D	172 E	2	90	9,870	8	305	591	301	30,505

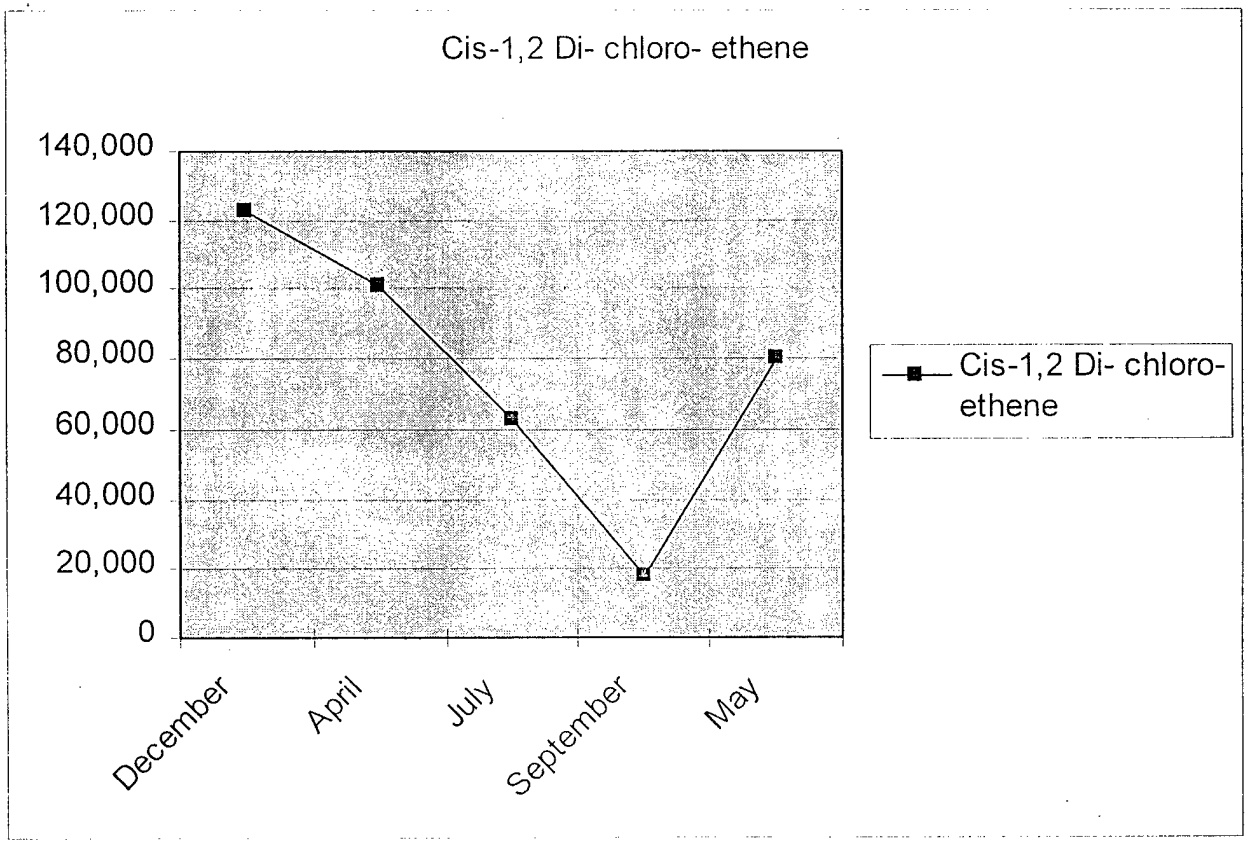
Kelly AFB E-1 Site
Target VOC Analytes
Groundwater

Sample ID:	Date Analyzed:	Matrix Soil or Water	Vinyl Chloride	1,1 Di-chloro-ethene	Methylene chloride	1,1 Di-chloro-ethane	Cis-1,2 Di-chloro-ethene	Tri-chloro-ethene	Toluene	Chloro-benzene	1,2-Di-chloro-benzene	Total VOCS
MW-007												
	12/24/1997	water	6,600 DI	289.8 E	3 B	584	123,000	9,450	26	59	69	140,455
	04/27/1998	water	3,600	190.0 &	5 B	840	101,000	1,800	1	50	130	107,975
	07/01/1998	water	1,400 D	71.5 E	3	510	63,000	4,600	8	40	25	69,926
	09/15/1998	water	540 E	41	1	250	18,000	1,300	6	23	11	32,031
	10/28/1998	water	15,000	0	2,200		68,000	0				85,200
	05/11/1999	water	98,600 D	0	U	465	80,000	10,400		11,800	3,350	204,615
MW-119												
	12/24/1997	water	2,924 E	84.3 E	U	111	14,890	78	55.0	190	310	19,103
	04/27/1998	water	5,560 &	51.0	U	88	16,500	9	16	180	370	23,076
	07/01/1998	water	8,900 D	44.1	U	100	1,400	7	28	210	220	11,162
	09/15/1998	water	7,600 $	57	U	72	19,000	12	29	200	310	27,575
	10/28/1998	water	5,700	0	710		16,000	0				22,410
	05/10/1999	water	40,000 D	0			20,500	0		985	675	62,520
MW-120												
	12/24/1997	water	6,958 DI	536.5 D	118 BD	474	333,795	104,940	859	151	401	449,810
	04/29/1998	water	8,690 D	890 FD	950 BD	740	340,000	110,000	960		440	464,380
	07/01/1998	water	7,600 D	640 FD	16	390	22,000	7,600	330	38	260	39,386
	09/15/1998	water	2,200 E	230 E	U	300	280,000	45,000	280	40	120	328,855
	10/28/1998	water		0	8,500		250,000	52,000				310,500
	05/11/1999	water	35,900 E	2,660	U	1,140	394,000	57,800			165	494,015
MW-121												
	12/24/1997	water	966 D	2,826 D	1,125 BD	799	43,625	497,875	5,337	29	351	556,882
	04/29/1998	water	1,600 D	3,400 D	2,100 BD	900	42,000	57,000	6,700		530	117,580
	09/15/1998	water	1,700 E	1,800 E	660 E	990	75,000	480,000	3,200	12	270	566,639
	10/28/1998	water	2,200	3,000	4,400	1,300	46,000	430,000	5,700			492,600
	05/11/1999	water	12,000 E	5,780	1,960	2,120	94,000	491,000	9,010		210	617,455
MW-122												
	12/24/1997	water	5,560 D	139.5 D	107 BD	156	21,320	1,077	177	370		29,129
	04/27/1998	water	7,780 &	150.0 &	5 B	210	42,000	3,800	470	650	940	56,655
	07/01/1998	water	6,800 D	49.5	0	100	15,000	23	550	220	300	23,274
	09/21/1998	water	5,080 D	0			26,305	1,825				33,210
	10/28/1998	water	4,900	0	790		16,000	0		550	690	22,930
	05/11/1999	water	159,000 D	98	4	152	101,000	7	3,040	6,000	2,920	273,742
MW-124												
	12/24/1997	water	7,710 D	U	111 BD	132	29,770	484	86	513	906	40,516
	04/27/1998	water	6,400 &	72.0 E	U	86	2,200	26	110	500	770	10,854
	07/01/1998	water	5,400 D	31.3	U	43	1,000	7	13	320	400	7,447
	09/15/1998	water	6,600 $	59	U	61	22,000	6	130	470	410	30,261
	10/28/1998	water	4,900		1,100		38,000	0				44,000
	05/11/1999	water	18,100 D	172 E	2	90	9,870	8	305	591	301	30,505

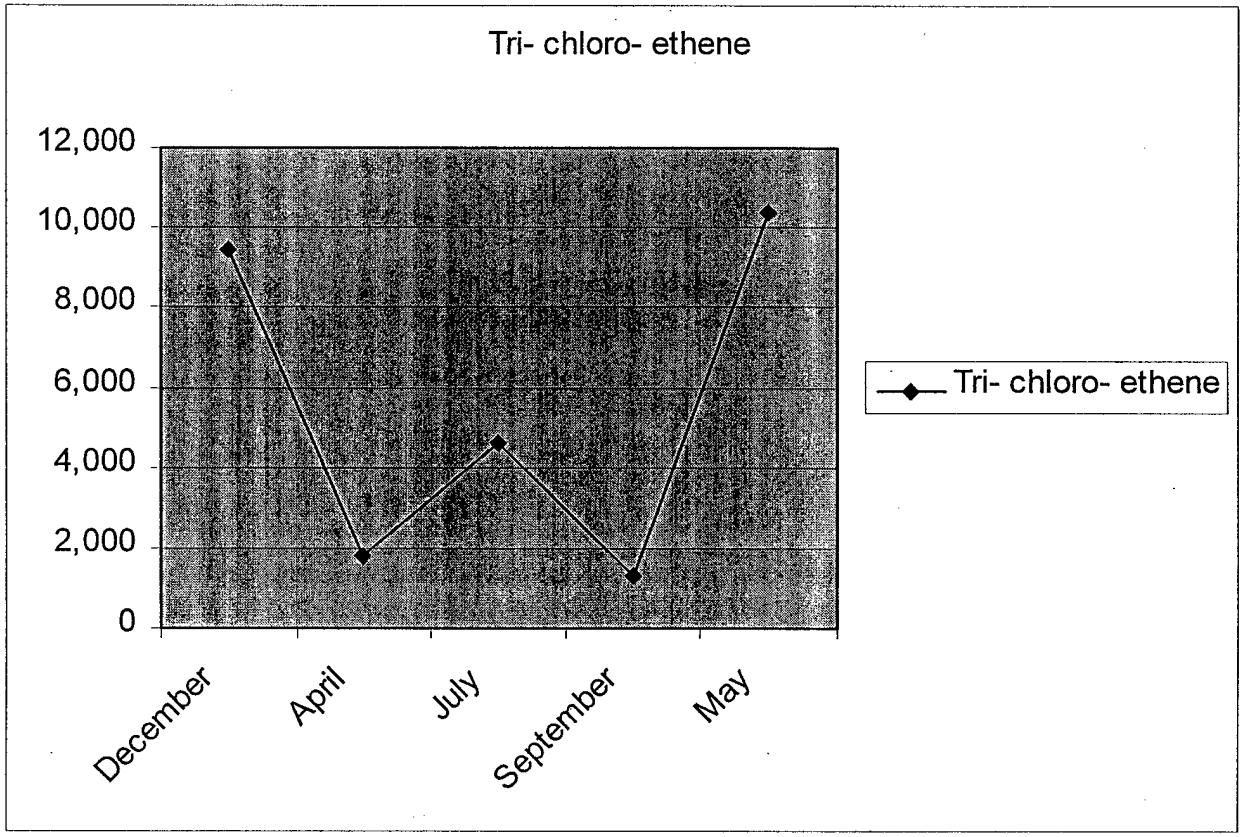
MW-007 VINYL CHLORIDE GROUNDWATER



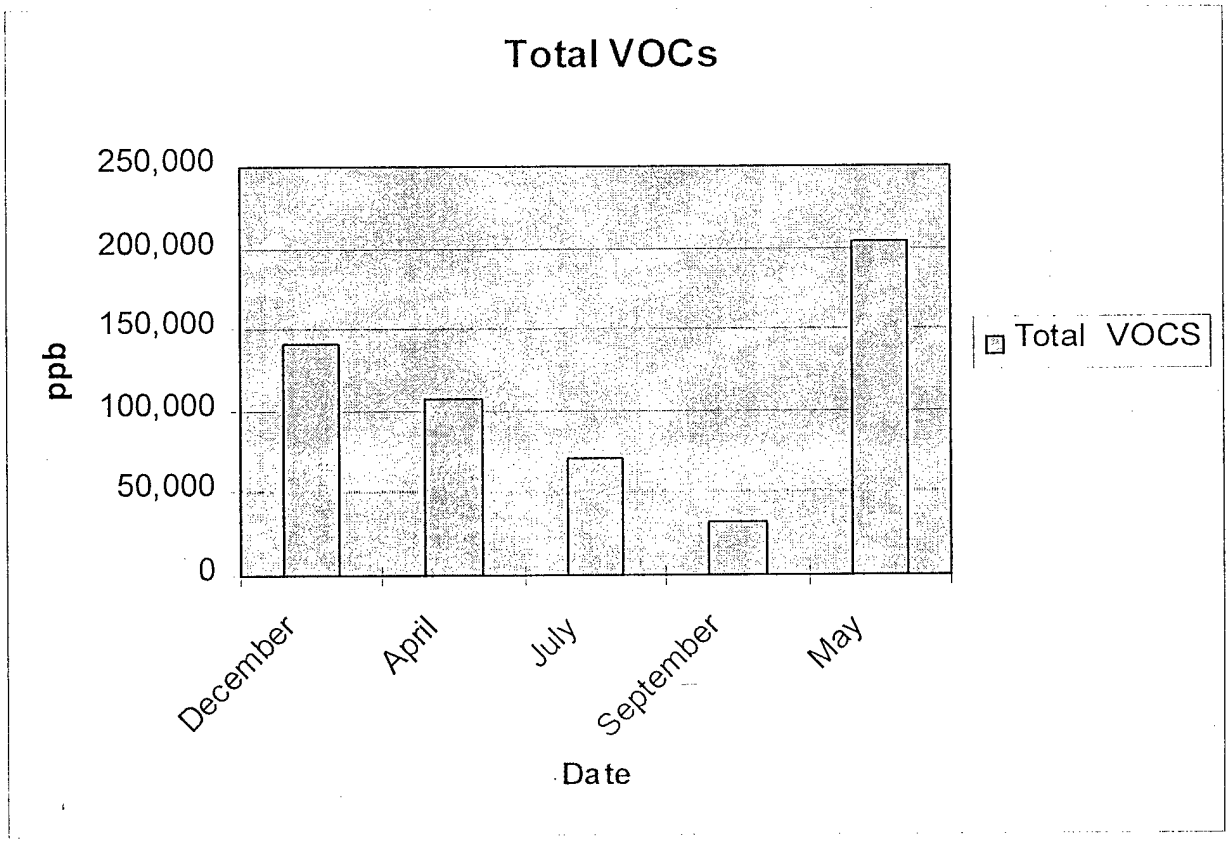
MW-007 cis 1,2 DCE GROUNDWATER



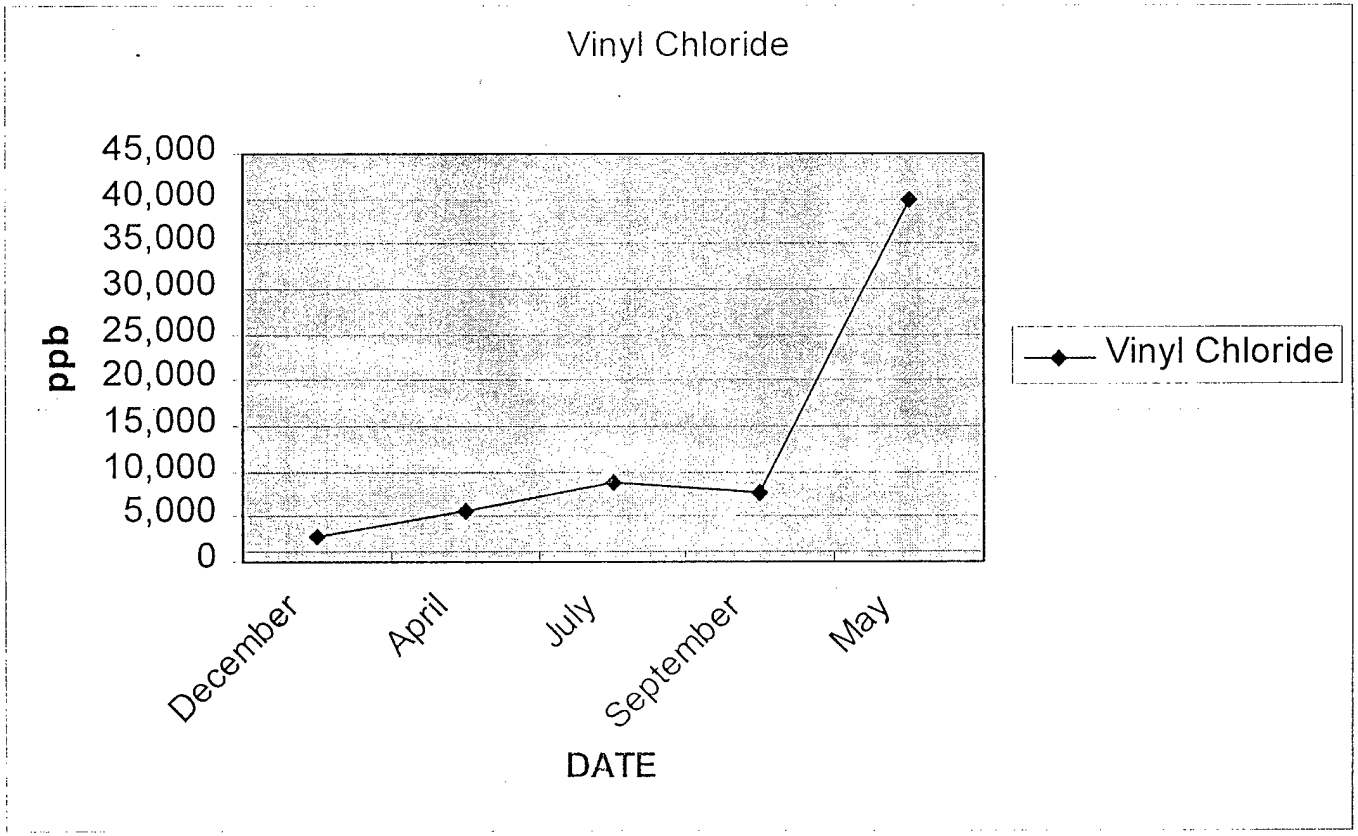
MW-007 TCE GROUNDWATER



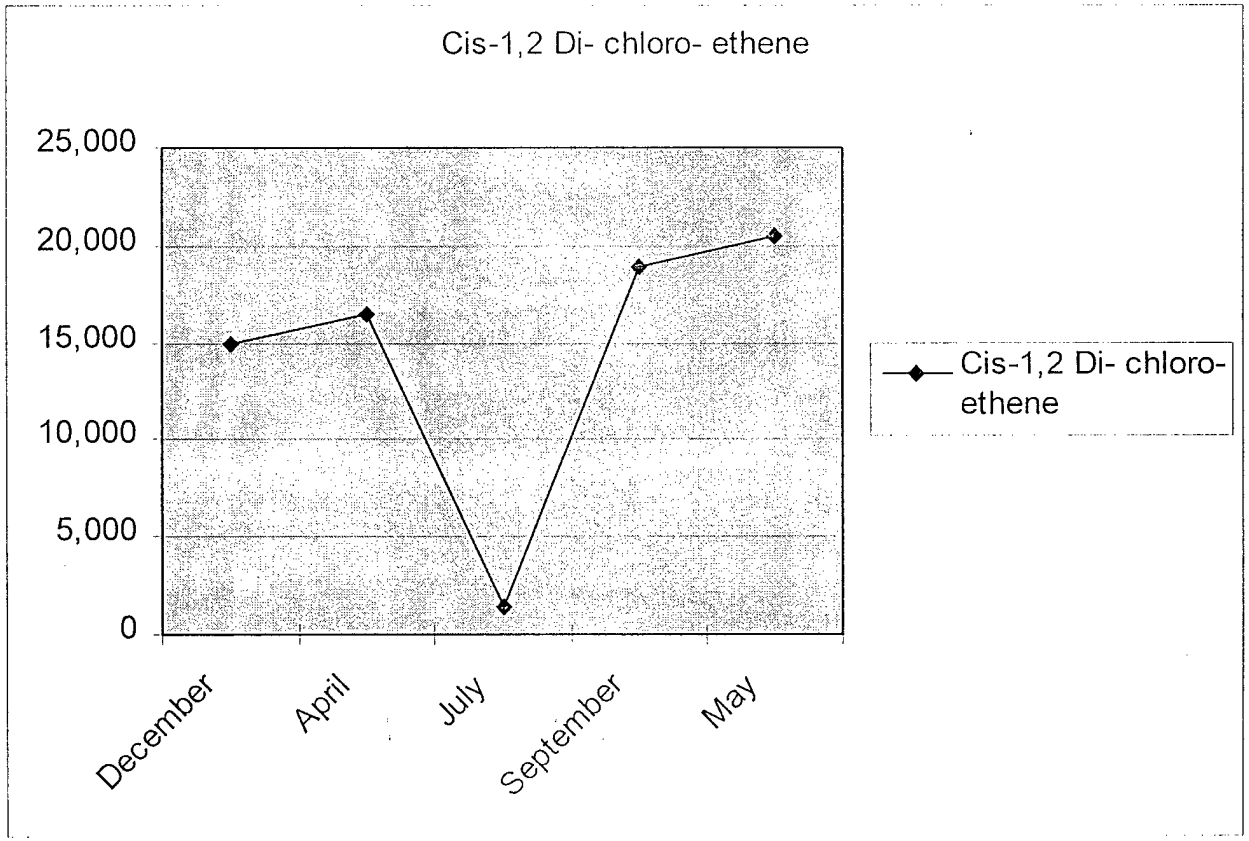
MW-007 TOTAL VOCS GROUNDWATER



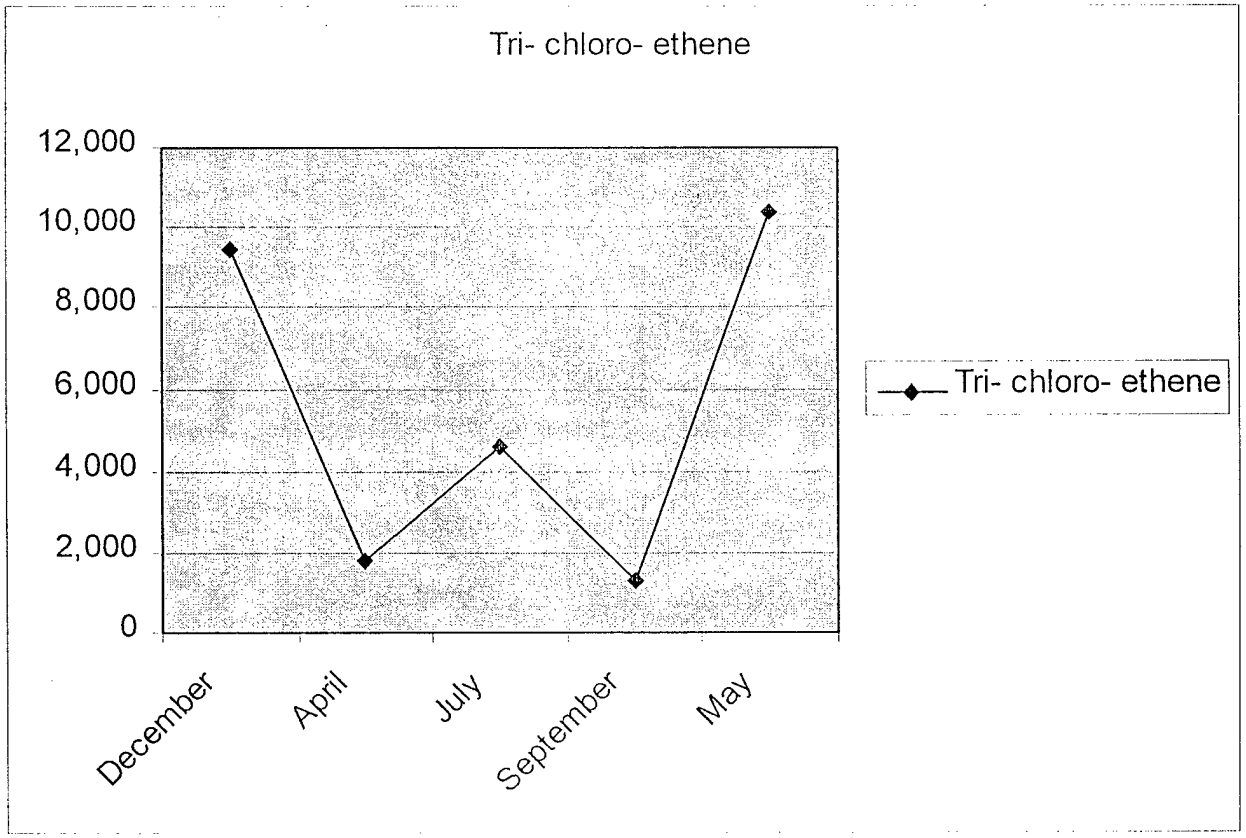
MW-119 VINYL CHLORIDE GROUNDWATER



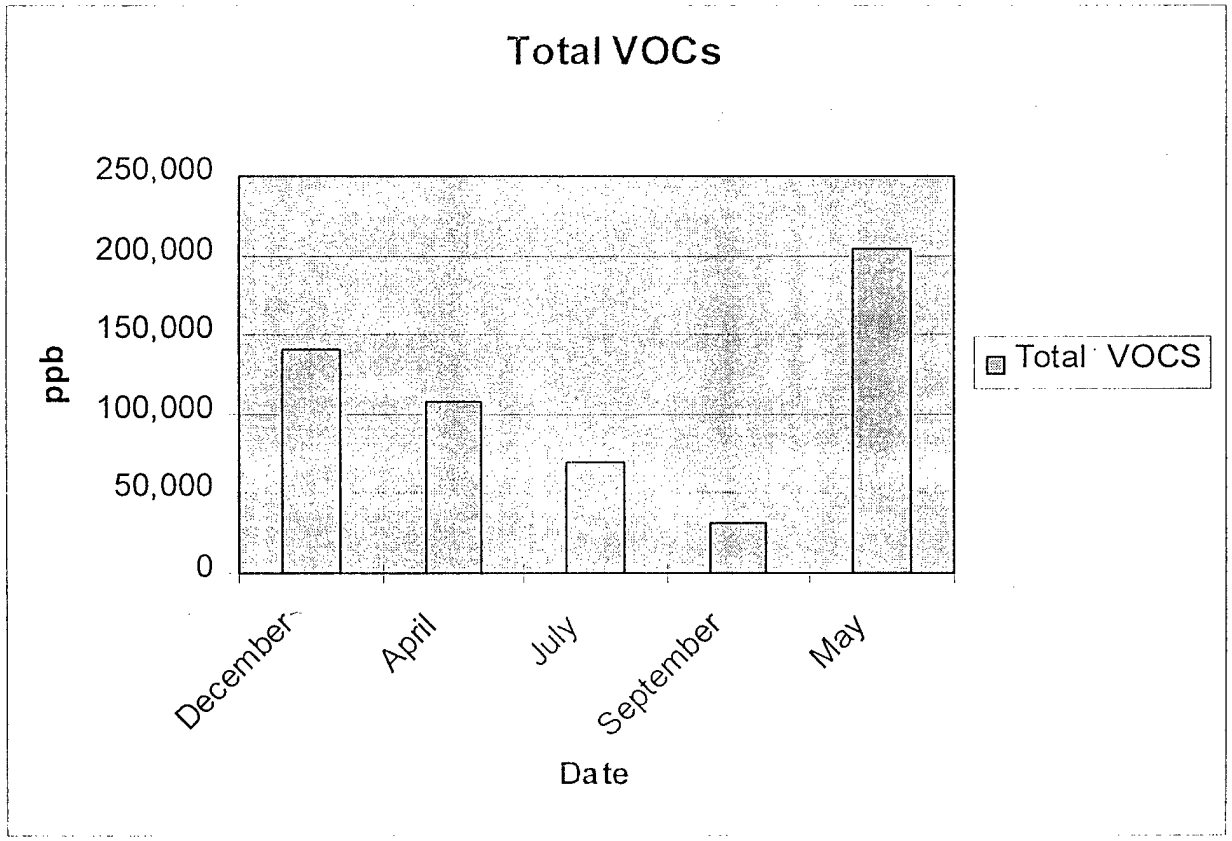
MW-119 cis 1,2 DCE GROUNDWATER



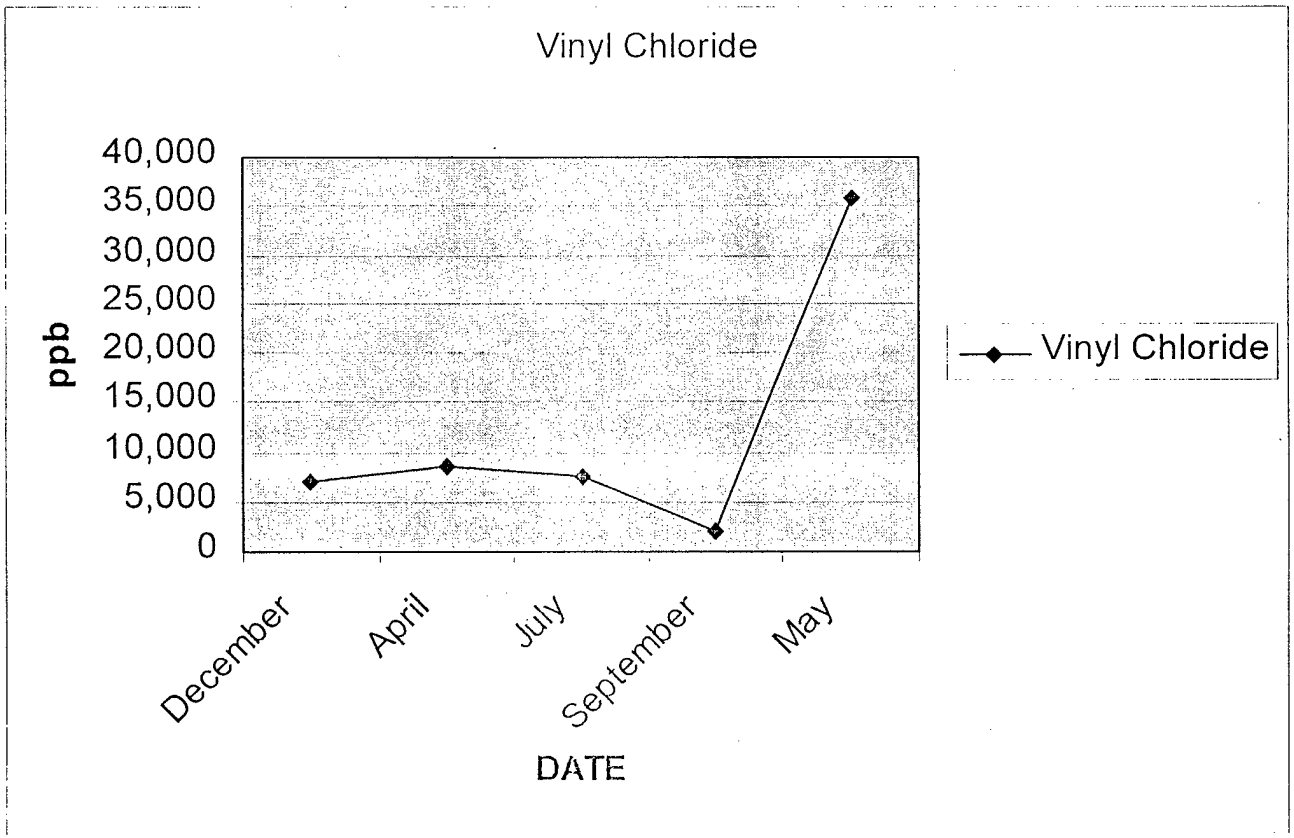
MW-119 TCE GROUNDWATER



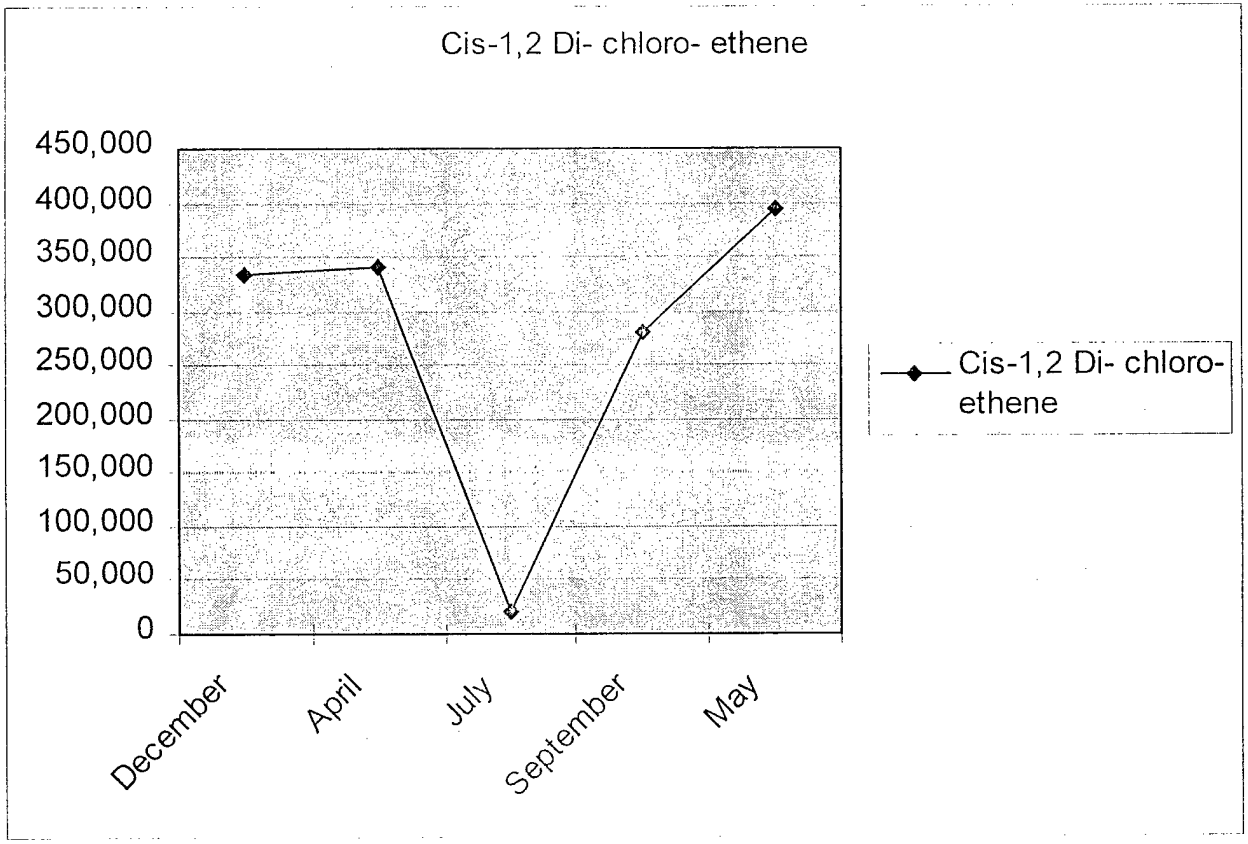
MW-119 TOTAL VOCS GROUNDWATER



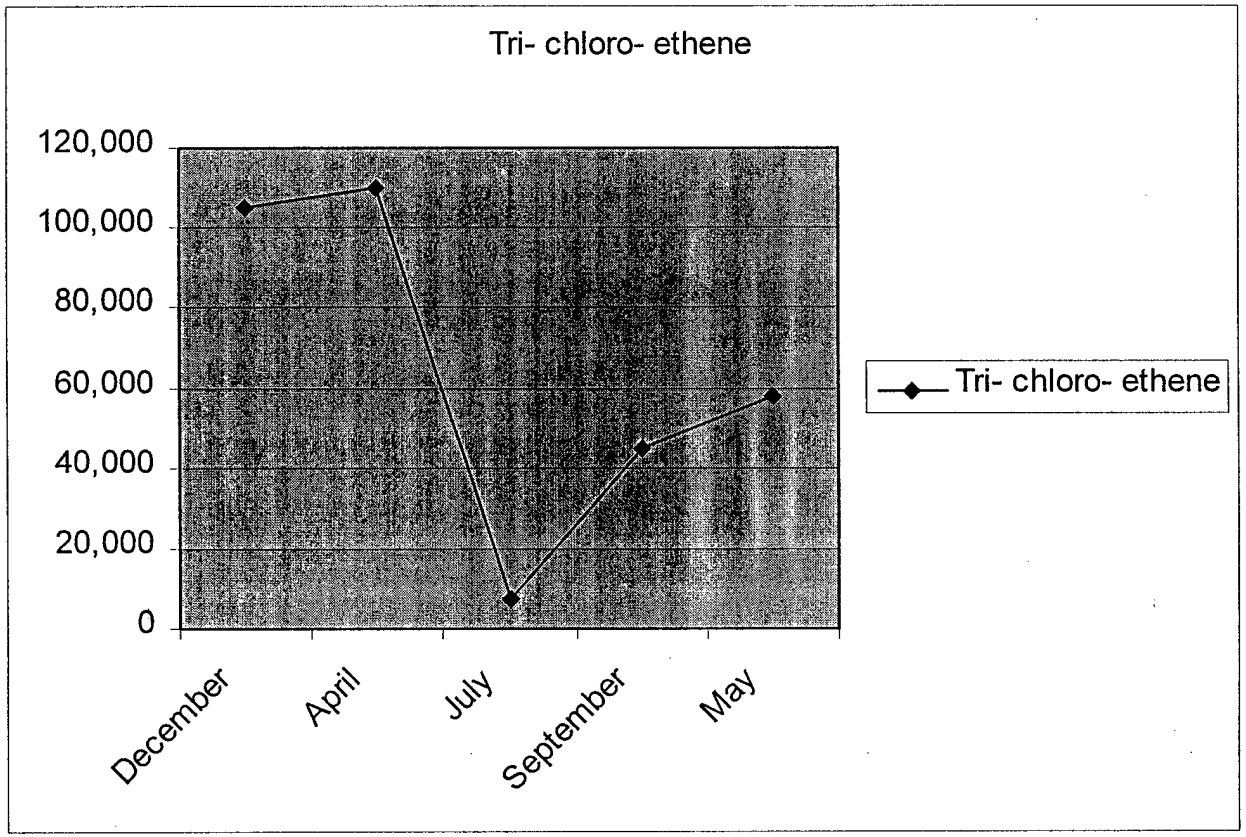
MW-120 VINYL CHLORIDE GROUNDWATER



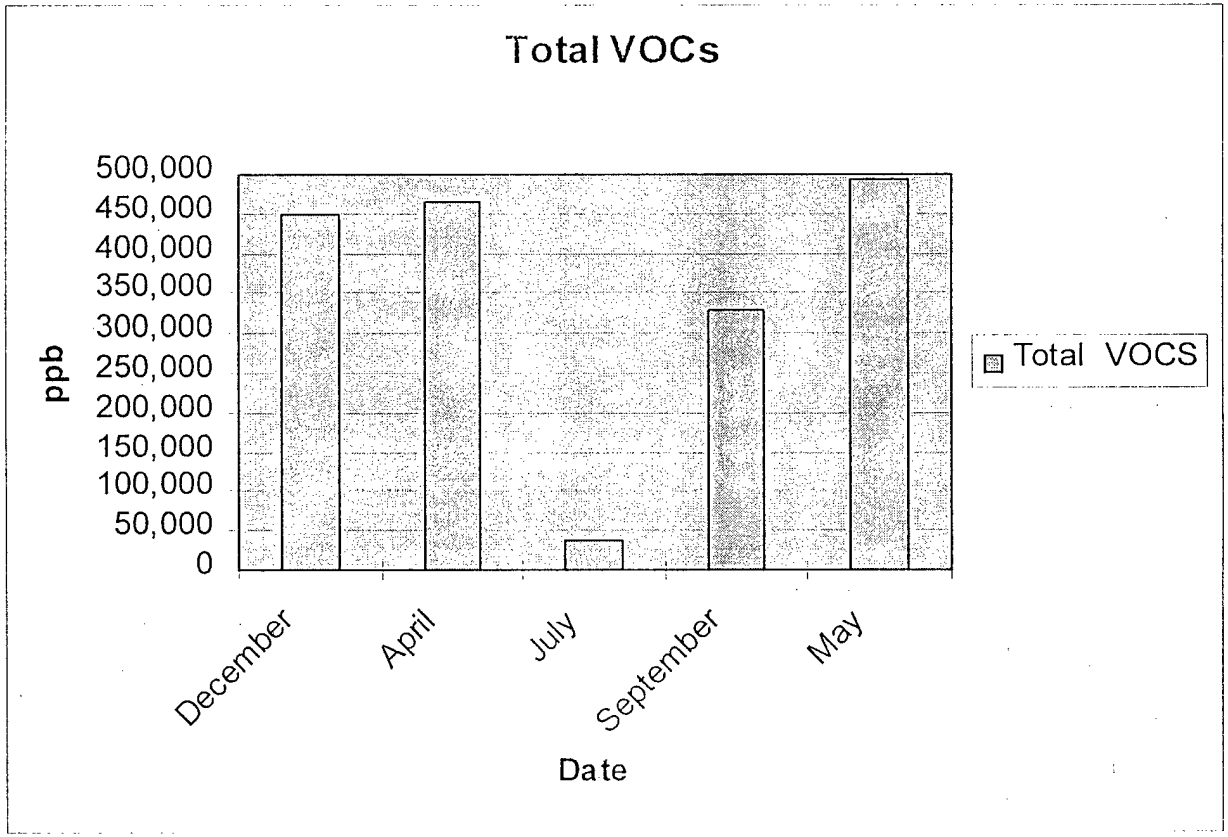
MW-120 cis 1,2 DCE GROUNDWATER



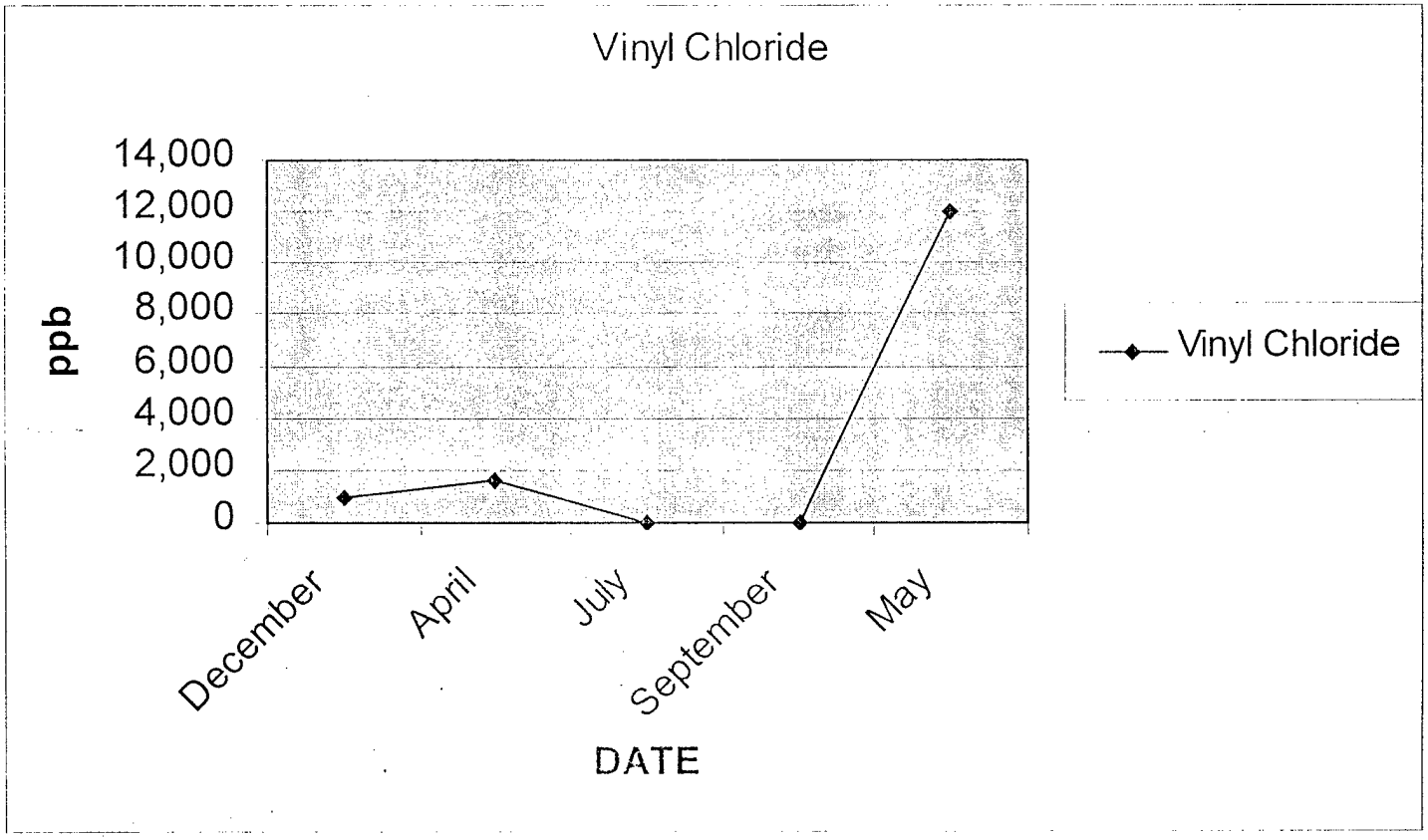
MW-120 TCE GROUNDWATER



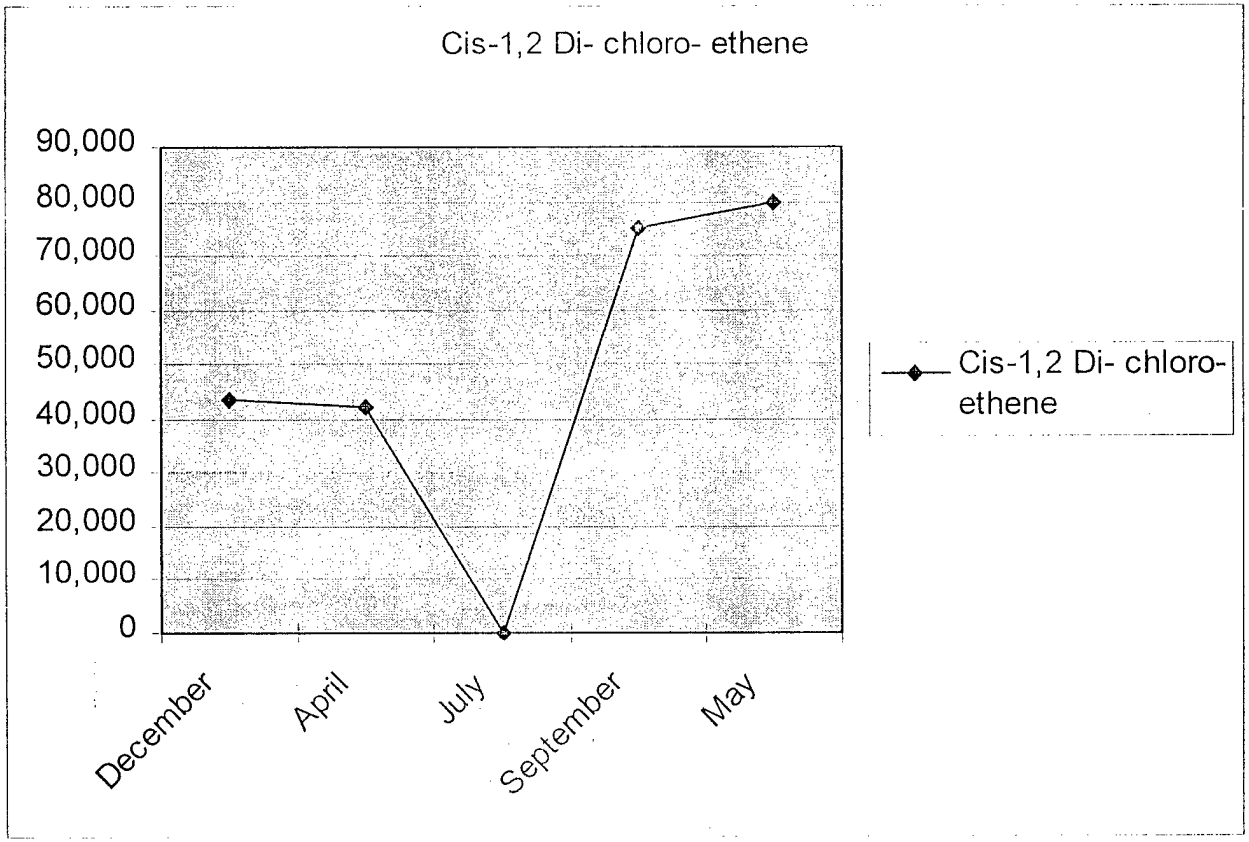
MW-120 TOTAL VOCS GROUNDWATER



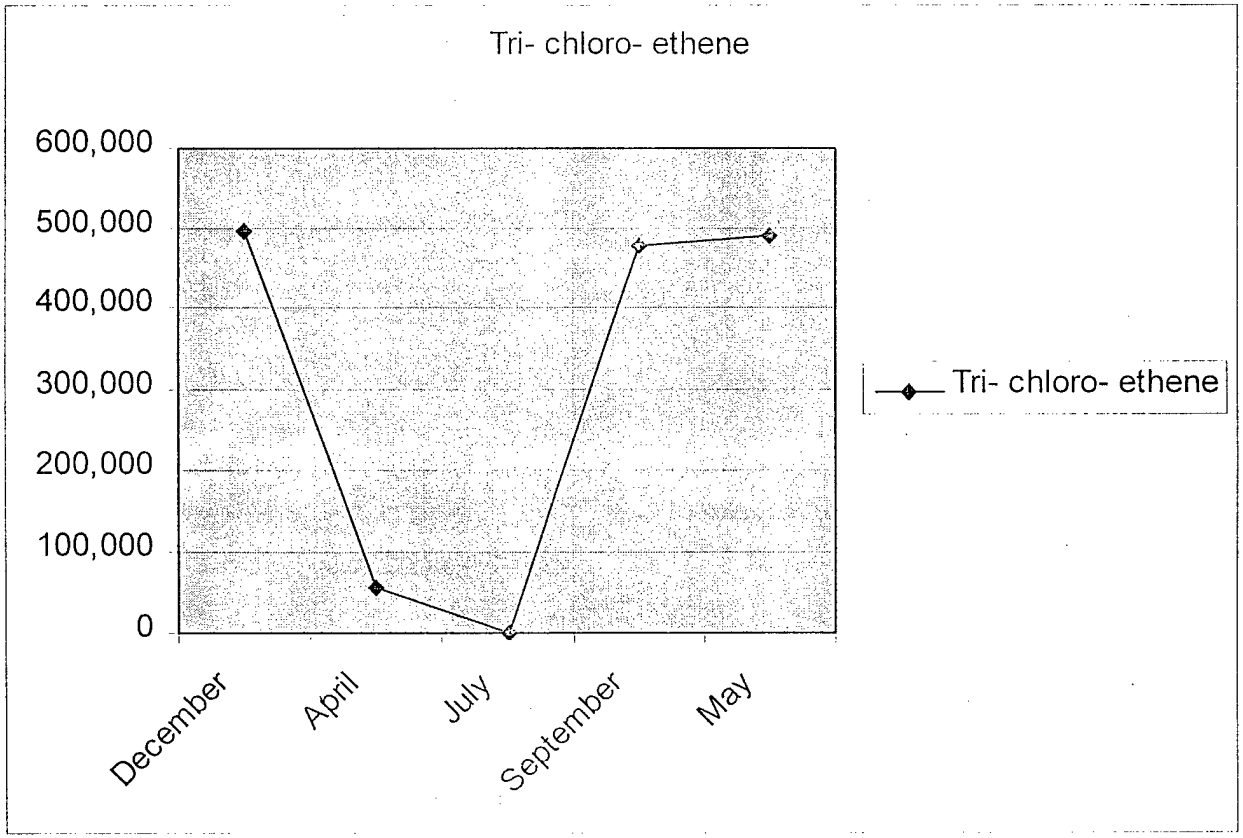
MW-121 VINYL CHLORIDE GROUNDWATER



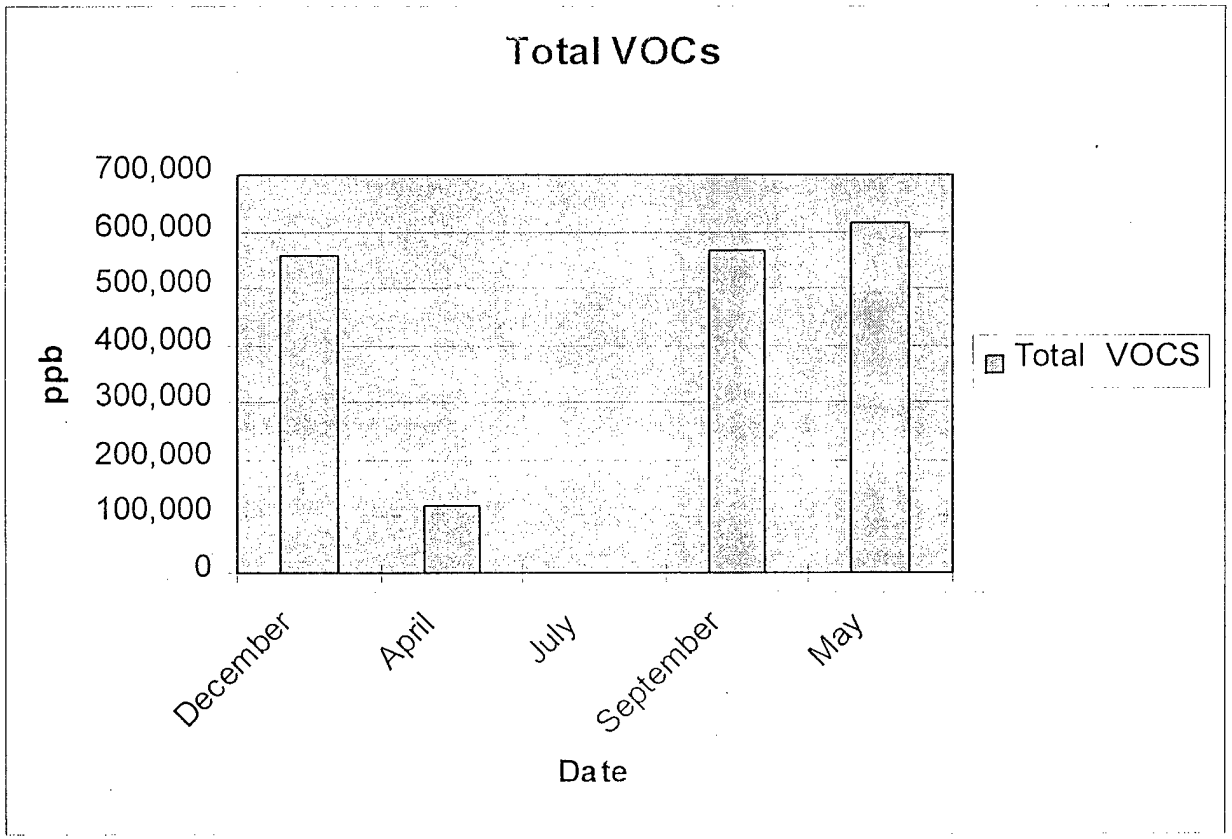
MW-121 cis 1,2 DCE GROUNDWATER



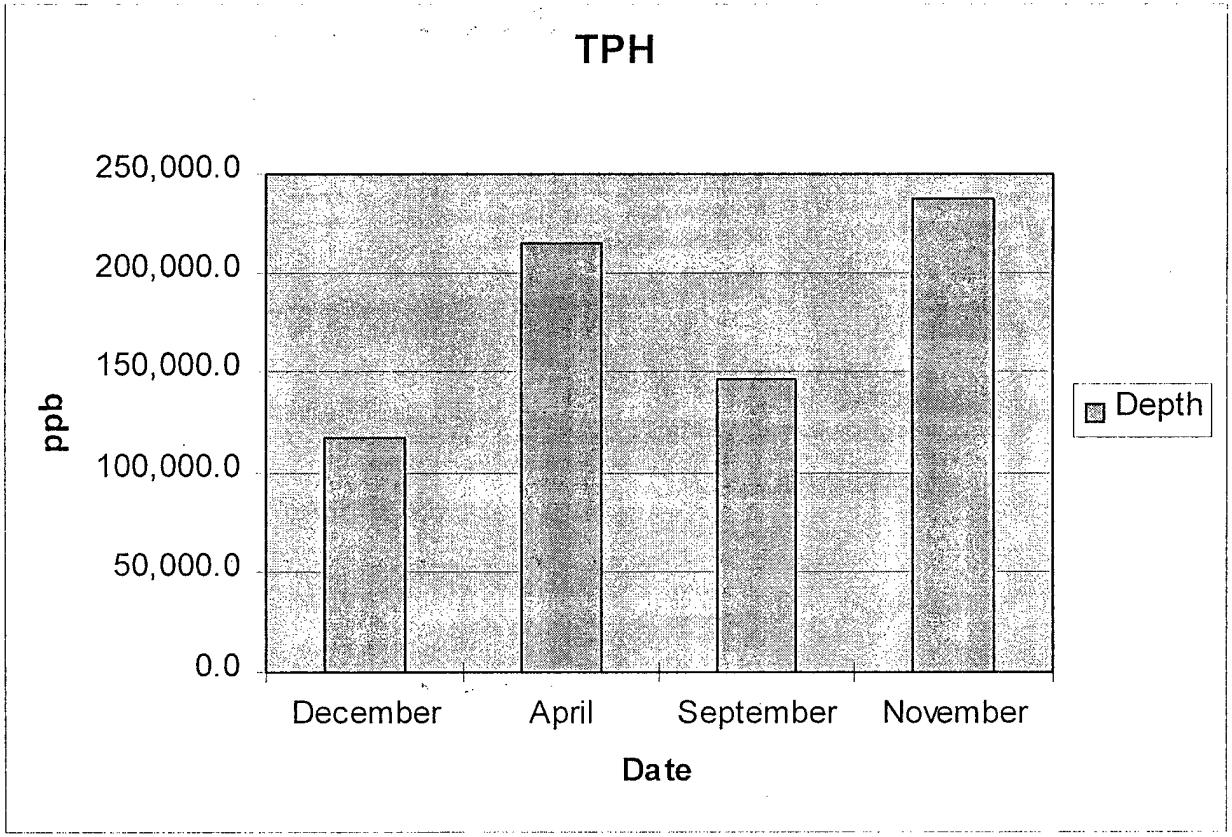
MW-121 TCE GROUNDWATER



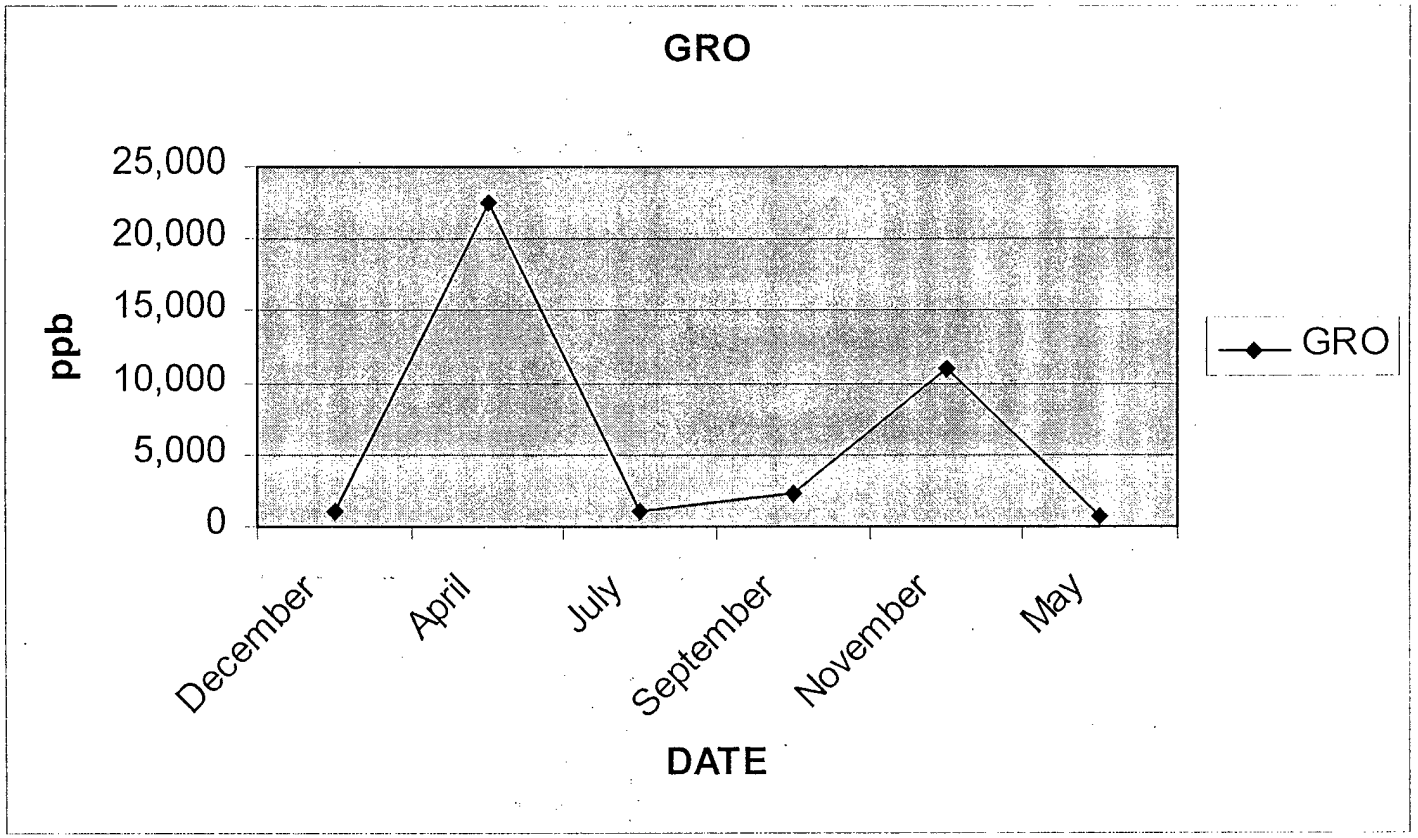
MW-121 TOTAL VOCS GROUNDWATER



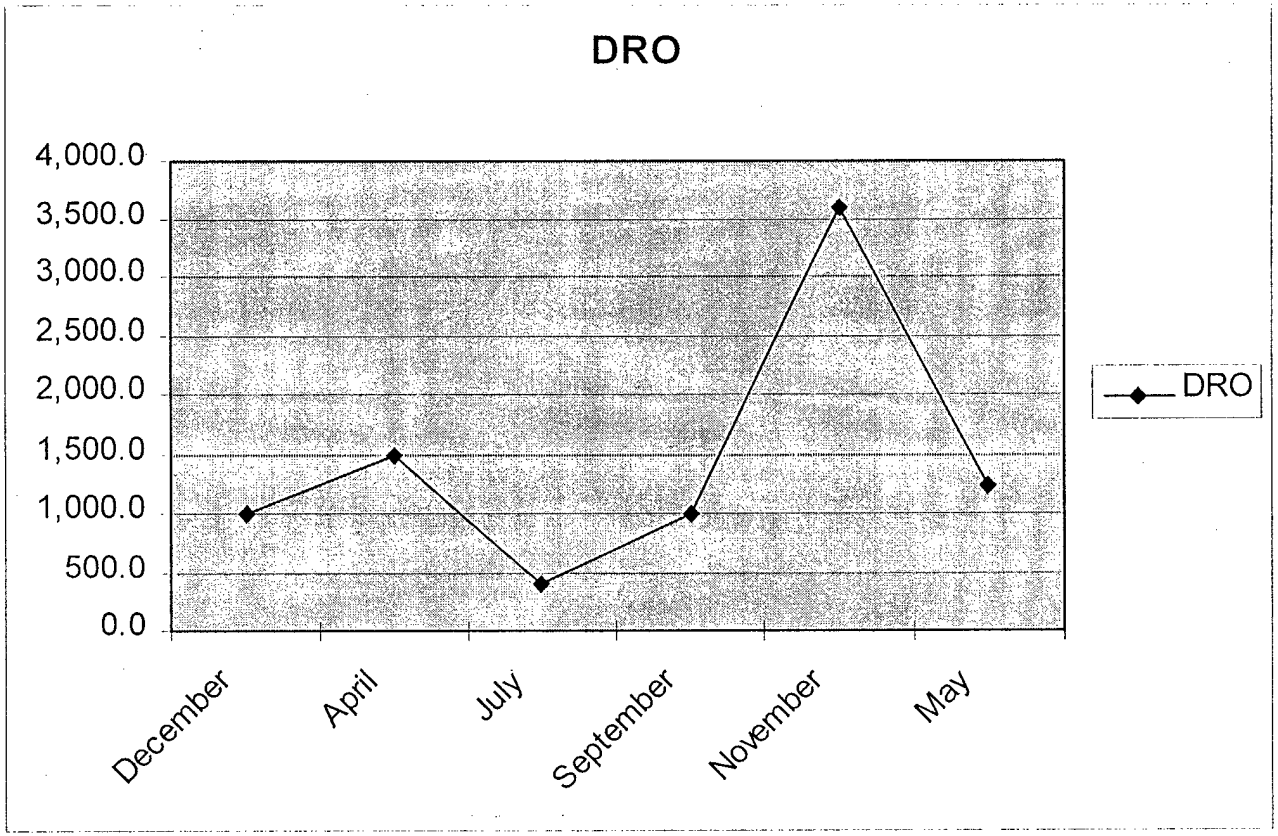
MW-121 TPH GROUNDWATER



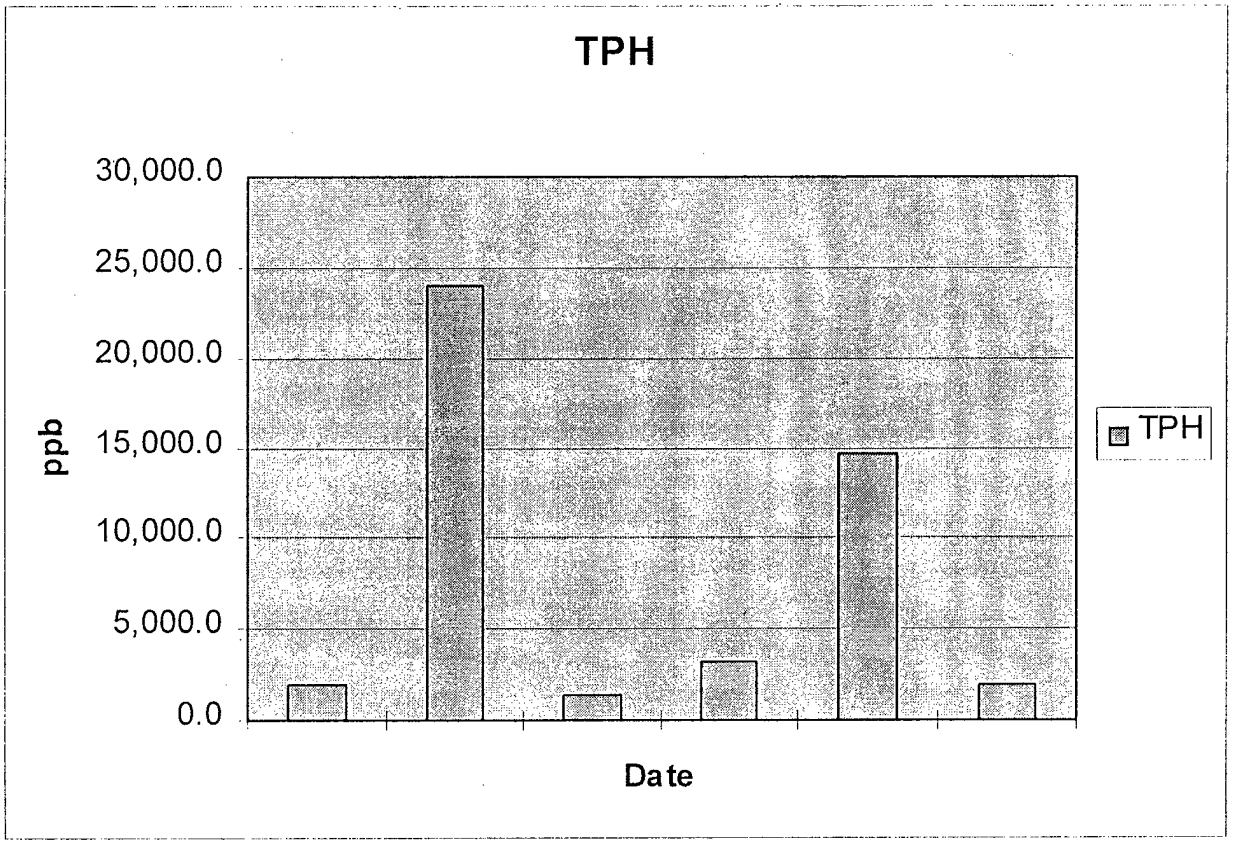
MW-122 GRO GROUNDWATER



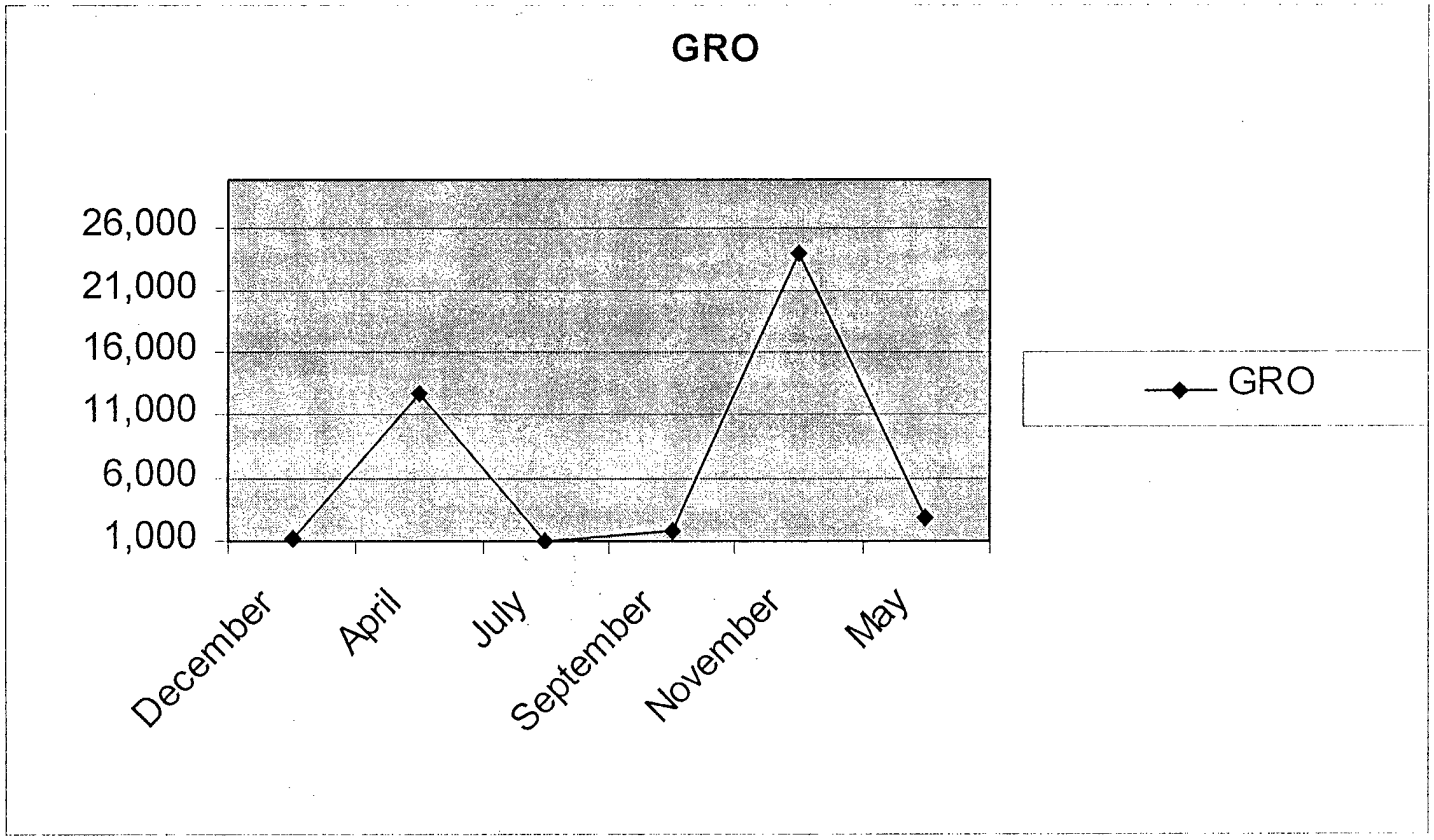
MW-122 DRO GROUNDWATER



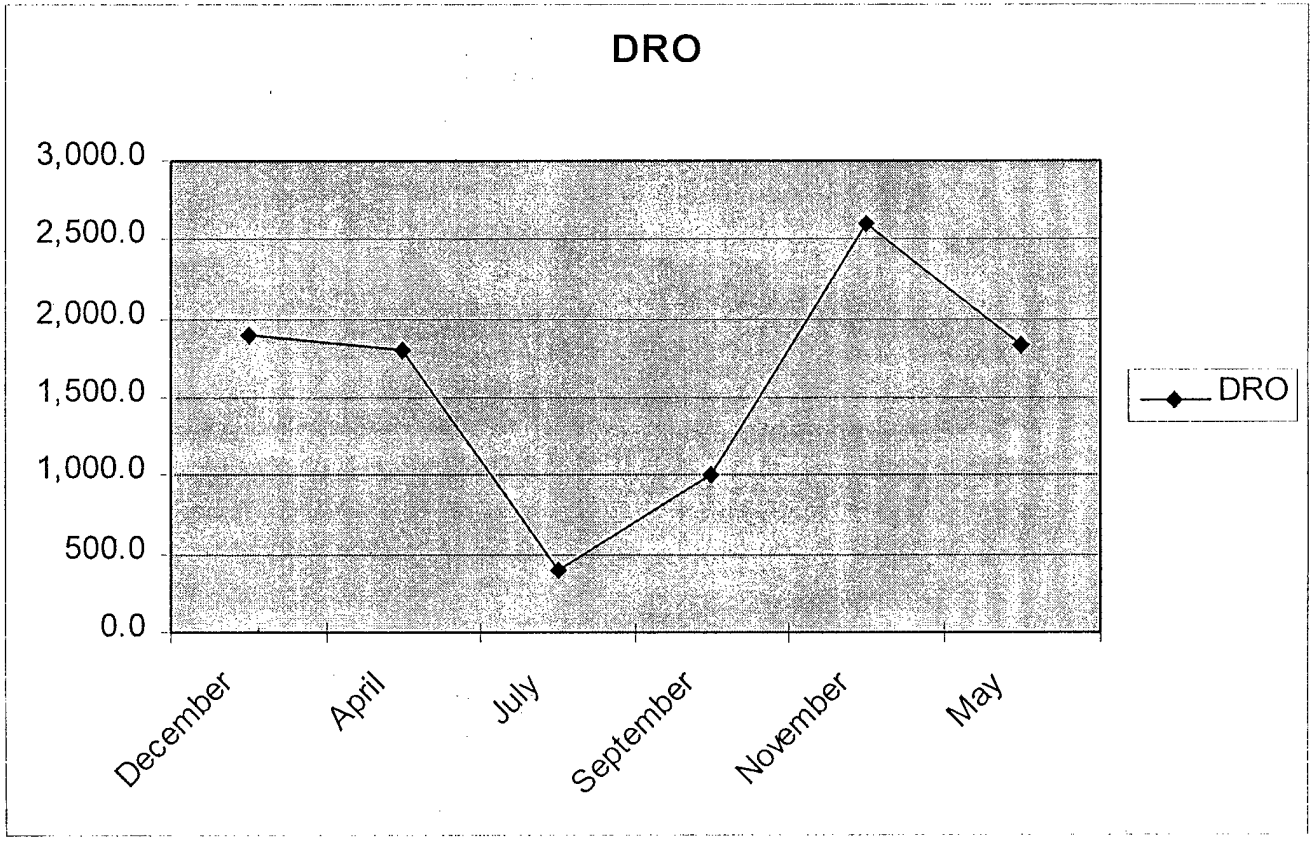
MW-122 TPH GROUNDWATER



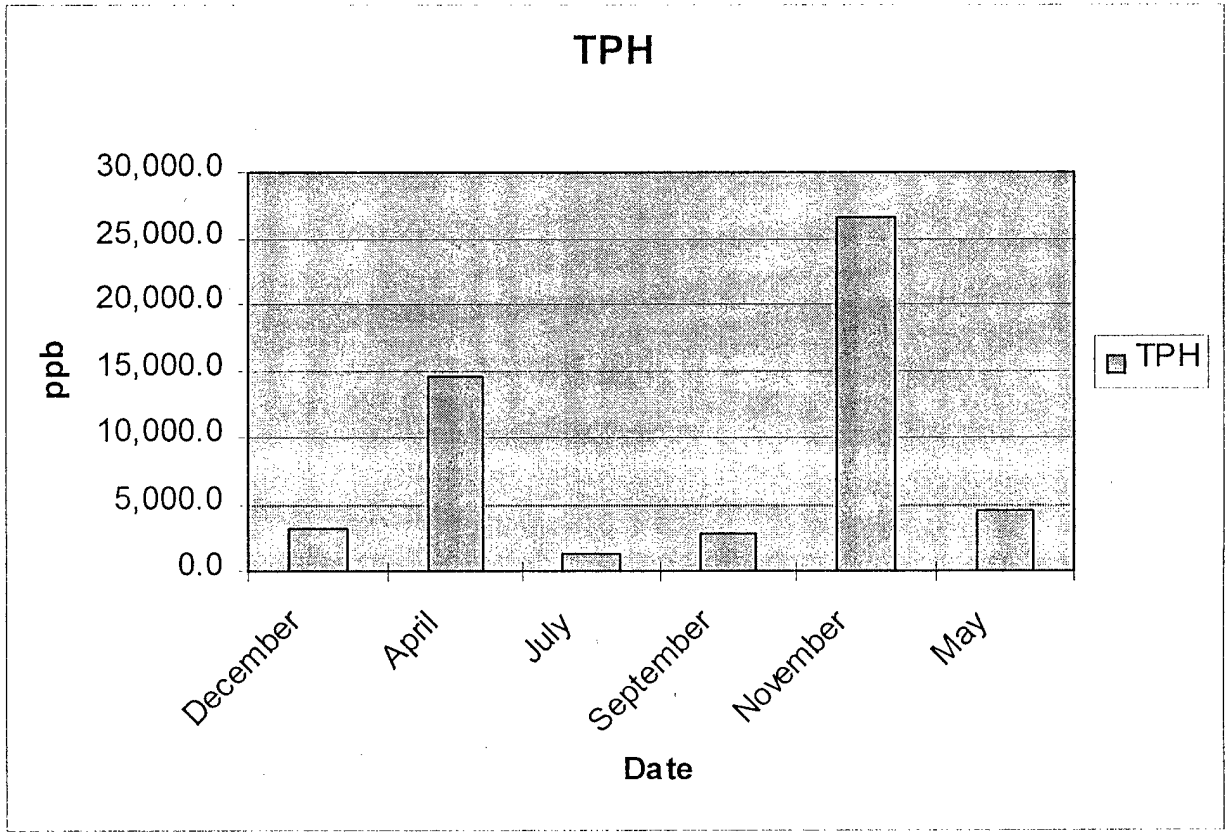
MW-124 GRO GROUNDWATER



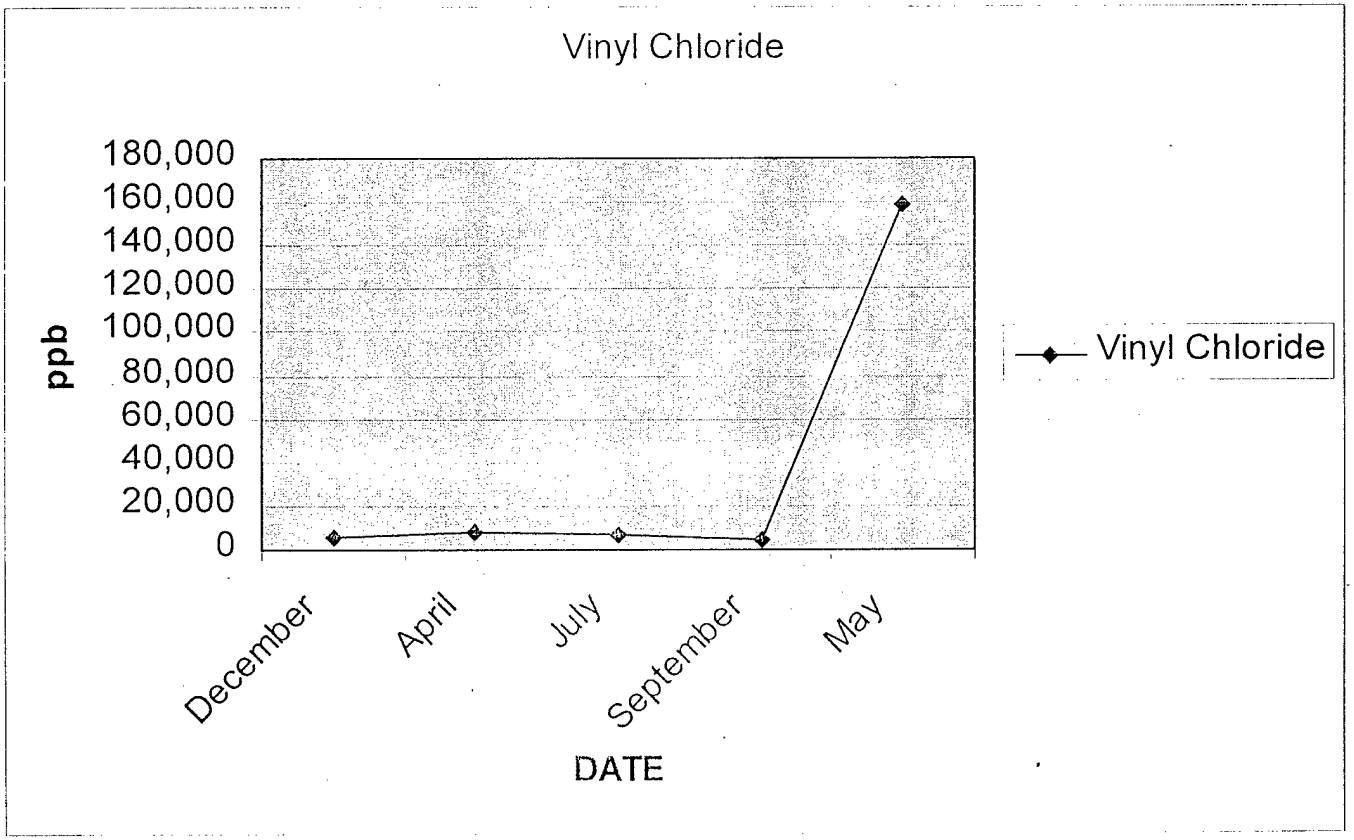
MW-124 DRO GROUNDWATER



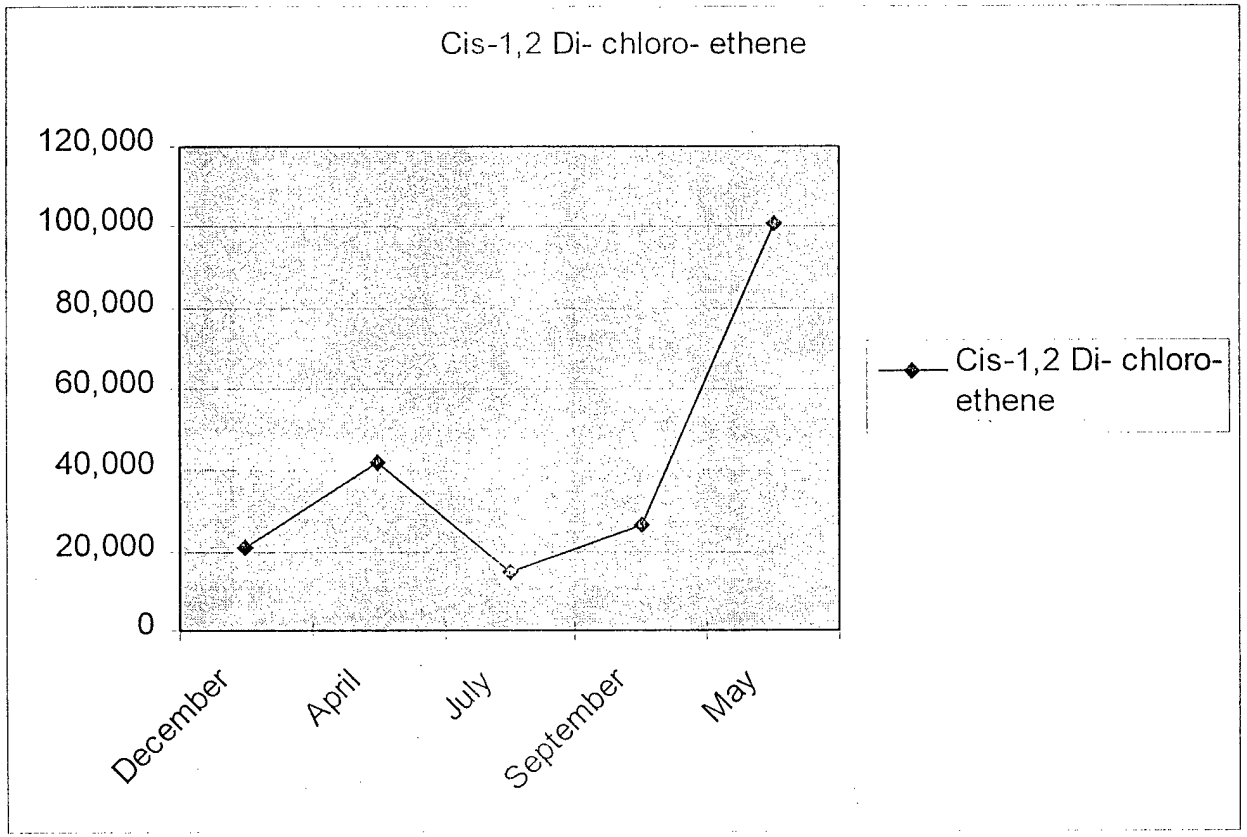
MW-124 TPH GROUNDWATER



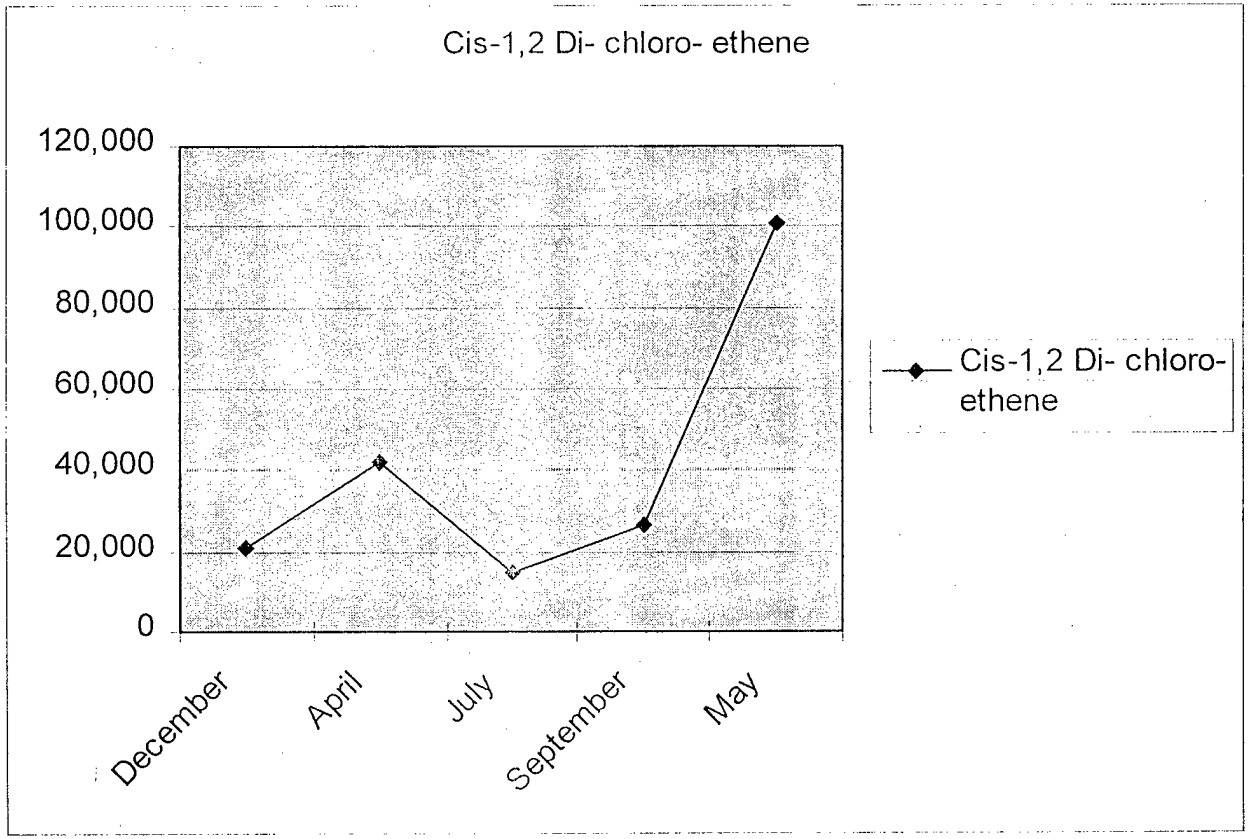
MW-122 VINYL CHLORIDE GROUNDWATER



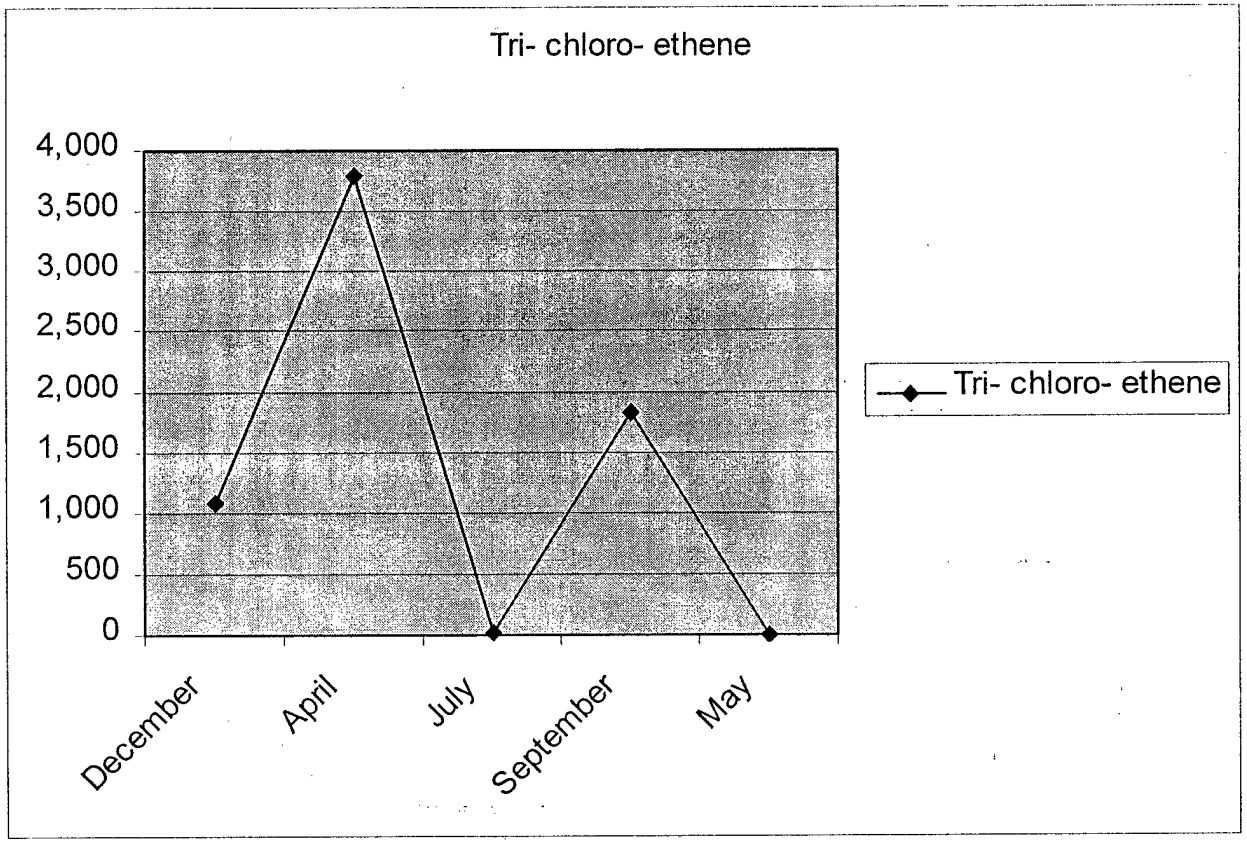
MW-122 cis 1,2 DCE GROUNDWATER



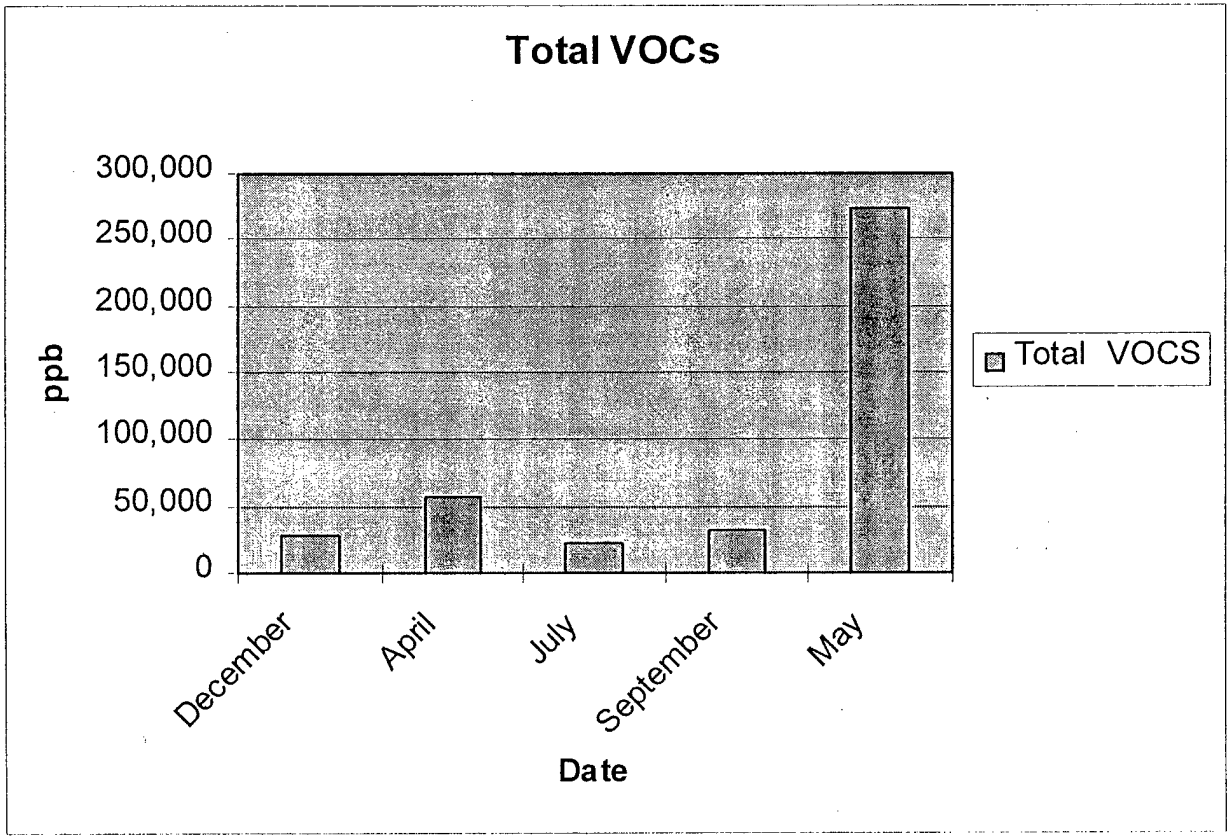
MW-122 cis 1,2 DCE GROUNDWATER



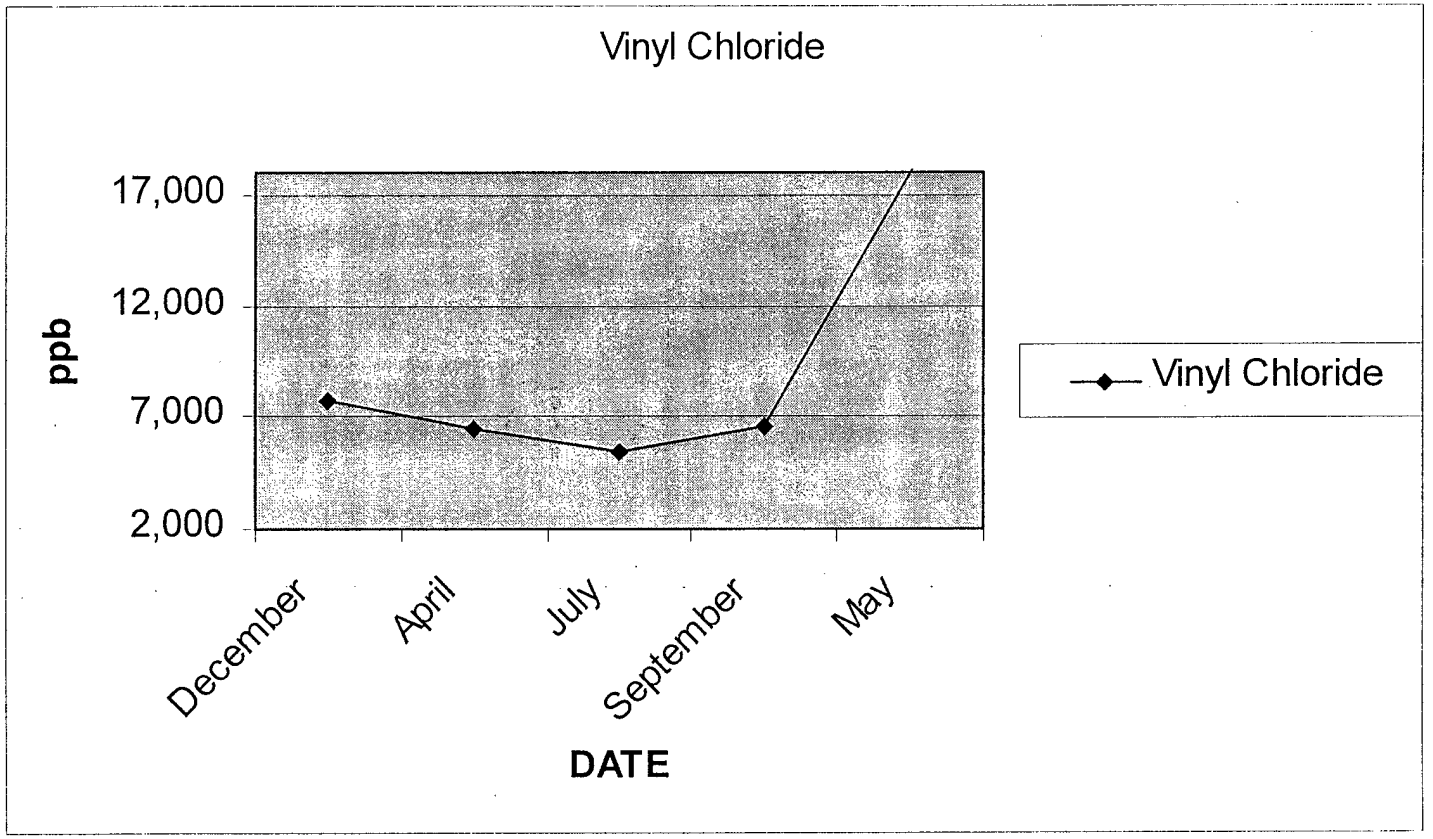
MW-122 TCE GROUNDWATER



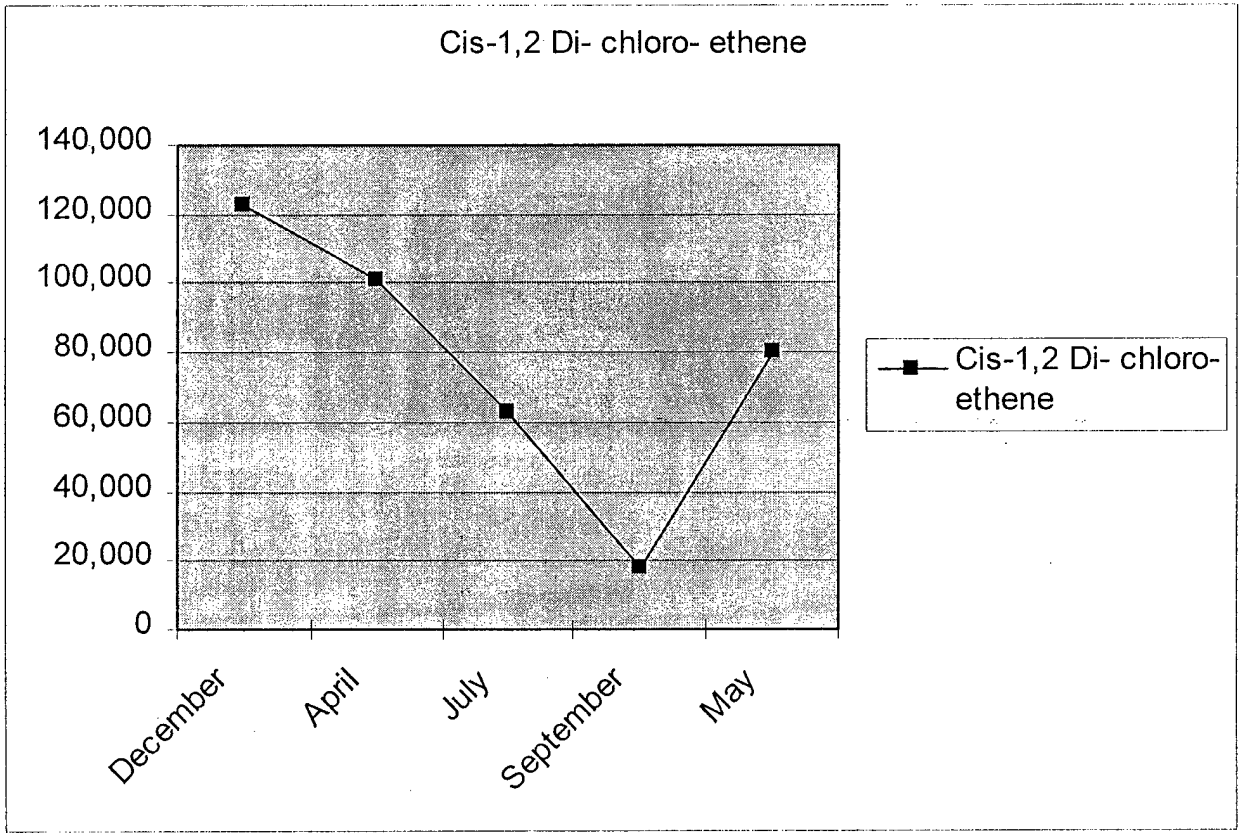
MW-122 TOTAL VOCS GROUNDWATER



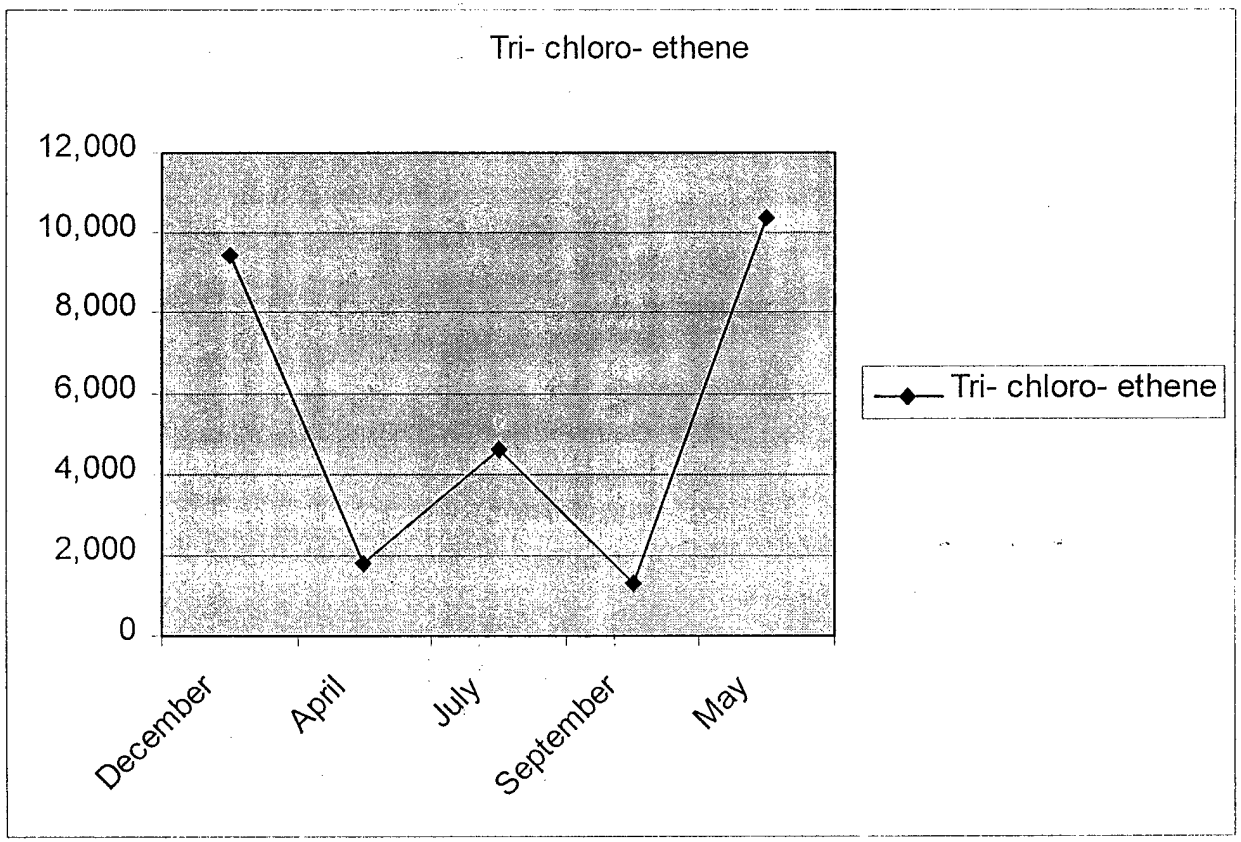
MW-124 VINYL CHLORIDE GROUNDWATER



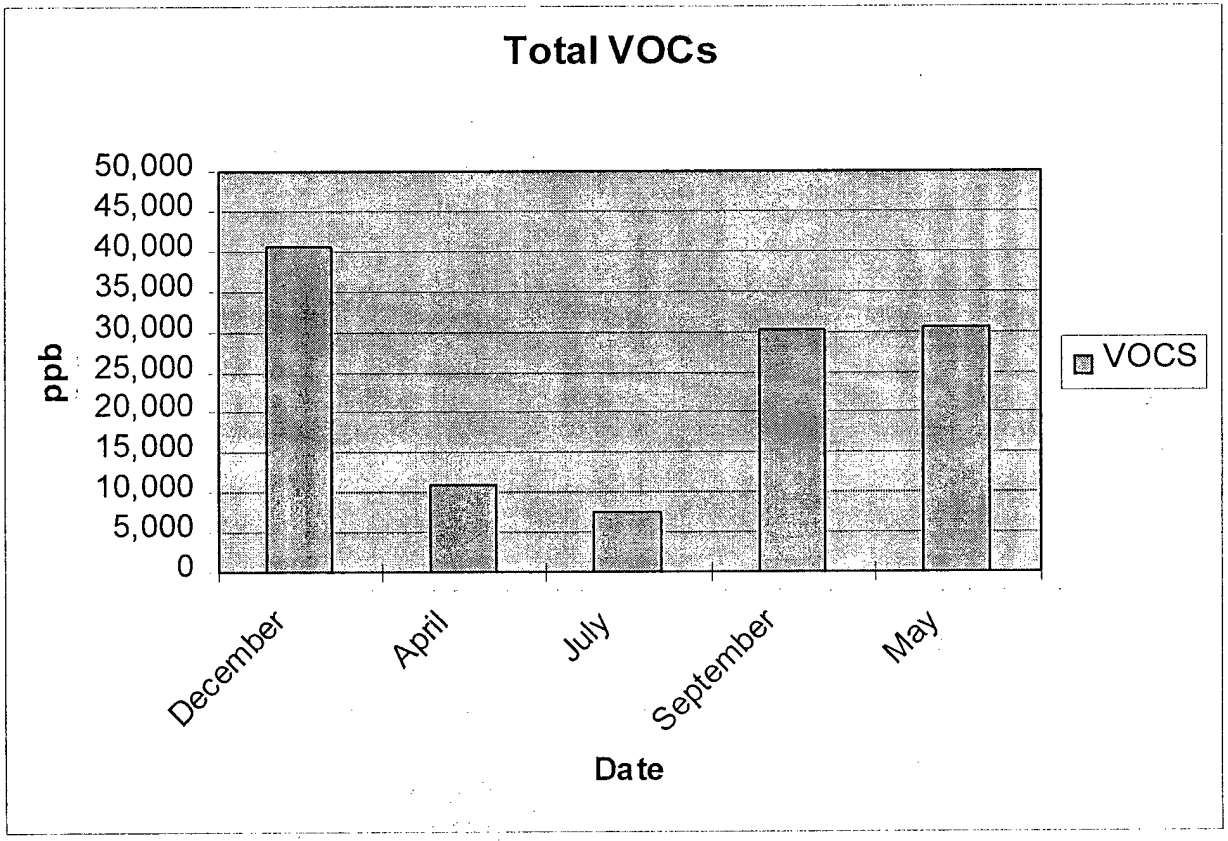
MW-124 cis 1,2 DCE GROUNDWATER



MW-124 TCE GROUNDWATER



MW-124 TOTAL VOCS GROUNDWATER



APPENDIX E

SOIL SAMPLING ANALYTICAL RESULTS ANALYSIS

TABLE 3.1.2
AMENDED SOIL SAMPLE #s OF CHAIN-OF-CUSTODY FORMS FOR MAY 1999 SOIL SAMPLES FROM KELLY AIR FORCE BASE

Current Sample #s		Sample Depth	New Sample #s
MW-122			
SB-1	WP021SB143	8'-10'	WP021SB180
SB-1	WP021SB143	18'-20'	WP021SB180
SB-1	WP021SB143	28'-30'	WP021SB180
MW-124			
SB-2	WP021SB144	8'-10'	WP021SB181
SB-2	WP021SB144	18'-20'	WP021SB181
SB-2	WP021SB144	28'-30'	WP021SB181
MW-120			
SB-3	WP021SB145	8'-10'	WP021SB182
SB-3	WP021SB145	18'-20'	WP021SB182
SB-3	WP021SB145	28'-30'	WP021SB182
MW-121			
SB-4	WP021SB146	8'-10'	WP021SB183
SB-4	WP021SB146	18'-20'	WP021SB183
SB-4	WP021SB146	28'-30'	WP021SB183
MW-119			
SB-5	WP021SB147	8'-10'	WP021SB184
SB-5	WP021SB147	18'-20'	WP021SB184
SB-5	WP021SB147	28'-30'	WP021SB184
MW-007			
SB-6	WP021SB148	8'-10'	WP021SB185
SB-6	WP021SB148	18'-20'	WP021SB185
SB-6	WP021SB148	28'-30'	WP021SB185
	WP021SB149	8'-10'	WP021SB186
	WP021SB149	18'-20'	WP021SB186
	WP021SB149	28'-30'	WP021SB186

Note: All current sample numbers need to be changed to the new sample numbers as indicated in the right column of the table. There are two sample containers from each sample depth for each sample. The sample numbers are distinguished apart by the sample depths.

TABLE 3.1.2
(Continued)

Current Sample #s	Sample Depth	New Sample #s
WP021SB150	8'-10'	WP021SB187
WP021SB150	18'-20'	WP021SB187
WP021SB150	28'-30'	WP021SB187
WP021SB151	8'-10'	WP021SB188
WP021SB151	18'-20'	WP021SB188
WP021SB151	28'-30'	WP021SB188
WP021SB152	8'-10'	WP021SB189
WP021SB152	18'-20'	WP021SB189
WP021SB152	28'-30'	WP021SB189
WP021SB153	8'-10'	WP021SB190
WP021SB153	18'-20'	WP021SB190
WP021SB153	28'-30'	WP021SB190
WP021SB154	8'-10'	WP021SB191
WP021SB154	18'-20'	WP021SB191
WP021SB154	28'-30'	WP021SB191
WP021SB155	8'-10'	WP021SB192
WP021SB155	18'-20'	WP021SB192
WP021SB155	28'-30'	WP021SB192
WP021SB156	8'-10'	WP021SB193
WP021SB156	18'-20'	WP021SB193
WP021SB156	28'-30'	WP021SB193

Note: All current sample numbers need to be changed to the new sample numbers as indicated in the right column of the table. There are two sample containers from each sample depth for each sample. The sample numbers are distinguished apart by the sample depths.

TPH as GRO/DRO in Soil

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	GRO		DRO	
MW-007							
(renamed SB-123)	12/01/1997	soil	8 TO 10	2,300.0	U	2,300.0	U
(renamed SB-130)	04/28/1998	soil	8 TO 10	**2,784,980.0**		**3,007,900.0**	D
(renamed SB-136)	07/01/1998	soil	8 TO 10	1,100.0	U	**3,900.0**	J
(renamed SB-142)	09/02/1998	soil	8 TO 10	**1,000.0**		11,300.0	U
(renamed SB-185)	05/11/1999	soil	8 TO 10	1,000.0	U	10,000.0	U
(renamed SB-123)	12/01/1997	soil	18 TO 20	2,300.0	U	2,300.0	U
(renamed SB-130)	04/28/1998	soil	18 TO 20	6,360.0	U	**8,700.0**	F
(renamed SB-136)	07/01/1998	soil	18 TO 20	1,200.0	U	11,600.0	U
(renamed SB-142)	09/02/1998	soil	18 TO 20	**30.0**		11,500.0	U
(renamed SB-185)	05/11/1999	soil	18 TO 20	1,000.0	U	10,000.0	U
(renamed SB-123)	11/28/1997	soil	28 TO 30	2,500.0	U	2,500.0	U
(renamed SB-130)	04/28/1998	soil	28 TO 30	1,516,990.0	U	**85,400.0**	FD
(renamed SB-136)	07/01/1998	soil	28 TO 30	782,200.0	U	**3,100.0**	J
(renamed SB-142)	09/02/1998	soil	28 TO 30	**70.0**		12,000.0	U
(renamed SB-185)	05/11/1999	soil	28 TO 30	1,000.0	U	10,000.0	U
MW-119							
	12/01/1997	soil	8 TO 10	9.1	U	9.1	U
(renamed SB-129)	04/27/1998	soil	8 TO 10	**235,980.0**	D	**360,400.0**	FD
(renamed SB-135)	07/01/1998	soil	8 TO 10	1,100.0	U	**13,900.0**	
(renamed SB-141)	09/02/1998	soil	8 TO 10	**43,660.0**		**225,700.0**	
(renamed SB-184)	05/11/1999	soil	8 TO 10	**280,000.0**		**566,000.0**	
	12/01/1997	soil	18 TO 20	2,300.0	U	2,300.0	U
(renamed SB-129)	04/27/1998	soil	18 TO 20	1,160.0	U	11,600.0	U
(renamed SB-135)	07/01/1998	soil	18 TO 20	1,200.0	U	12,000.0	U
(renamed SB-141)	09/02/1998	soil	18 TO 20	**200.0**		16,700.0	U
(renamed SB-184)	05/11/1999	soil	18 TO 20	1,000.0	U	10,000.0	U
	12/01/1997	soil	28 TO 30	2,200.0	U	2,200.0	U
(renamed SB-129)	04/27/1998	soil	28 TO 30	1,060.0	U	10,600.0	U
(renamed SB-135)	07/01/1998	soil	28 TO 30	1,200.0	U	11,800.0	U
(renamed SB-141)	09/02/1998	soil	28 TO 30	**173,880.0**		**4,600.0**	J
(renamed SB-184)	05/11/1999	soil	28 TO 30	**14,100.0**		**364,000.0**	
MW-120							
	11/28/1997	soil	9 TO11	2,300.0	U	2,300.0	U
(renamed SB-127)	04/27/1998	soil	8 TO 10	1,140.0	U	**3,800.0**	F
(renamed SB-133)	07/01/1998	soil	8 TO 10	1,200.0	U	11,700.0	U
(renamed SB-139)	09/02/1998	soil	8 TO 10	**40.0**		11,500.0	U
(renamed SB-182)	05/11/1999	soil	8 TO 10	1,000.0	U	10,000.0	U
	11/28/1997	soil	18 TO 19	2,300.0	U	2,300.0	U
(renamed SB-127)	04/28/1998	soil	18 TO 20	1,240.0	U	12,400.0	
(renamed SB-133)	07/01/1998	soil	18 TO 20	1,100.0	U	10,900.0	U
(renamed SB-139)	09/02/1998	soil	18 TO 20	**30.0**		11,500.0	U
(renamed SB-182)	05/11/1999	soil	18 TO 20	1,000.0	U	**12,200.0**	
	11/28/1997	soil	28 TO 30	2,500.0	U	2,500.0	U
(renamed SB-127)	04/27/1998	soil	20 to 30	1,220.0	U	**3,500.0**	F
(renamed SB-133)	07/01/1998	soil	28 TO 30	1,300.0	U	12,600.0	U
(renamed SB-139)	09/02/1998	soil	28 TO 30	**200.0**		12,300.0	U

All results in ppb

TPH as GRO/DRO
in Soil

(renamed SB-182)	05/11/1999	soil	28 TO 30	1,000.0	U	10,000.0	U
MW-121							
	11/28/1997	soil	8 TO 10	5,000.0	U	5,000.0	U
(renamed SB-128)	04/27/1998	soil	8 TO 10	1,180.0		11,800.0	U
(renamed SB-134)	07/01/1998	soil	8 TO 10	**1,052,050.0**		**220,300.0**	**JD**
(renamed SB-140)	09/03/1998	soil	8 TO 10	**500.0**		11,600.0	U
(renamed SB-183)	05/11/1999	soil	8 TO 10	**2,630,000.0**		**3,840,000.0**	
	11/28/1997	soil	18 TO 20	4,800.0	U	4,800.0	U
(renamed SB-128)	04/27/1998	soil	18 TO 20	11,600.0	U	11,600.0	U
(renamed SB-134)	07/01/1998	soil	18 TO 20	148,100.0	U	**24,900.0**	
(renamed SB-140)	09/03/1998	soil	18 TO 20	**3,800.0**		**11,700.0**	
(renamed SB-183)	05/11/1999	soil	18 TO 20	**22,600.0**		**39,900.0**	
	11/28/1997	soil	28 TO 30	2,500.0	U	2,500.0	U
(renamed SB-134)	07/01/1998	soil	28 TO 30	1,655,600.0	U	**1,548,100.0**	**D**
(renamed SB-140)	09/02/1998	soil	28 TO 30	**244,040.0**		**154,500.0**	**JD**
(renamed SB-183)	05/11/1999	soil	28 TO 30	**133,000.0**		**12,700.0**	
MW-122							
	12/01/1997	soil	8 TO 10	2,200.0	U	2,200.0	U
(renamed SB-125)	04/27/1998	soil	8 TO 10	**25,390.0**		28,100.0	U
(renamed SB-131)	07/01/1998	soil	8 TO 10	279,000.0	U	**99,000.0**	**D**
(renamed SB-137)	09/01/1998	soil	8 TO 10	**1,000.0**		**24,500.0**	
(renamed SB-180)	05/11/1999	soil	8 TO 10	**3,170.0**		10,000.0	U
	12/01/1997	soil	18 TO 20	2,400.0	U	2,400.0	U
(renamed SB-125)	04/27/1998	soil	18 TO 20	**2,190.0**		15,100.0	U
(renamed SB-131)	07/01/1998	soil	18 TO 20	1,300.0	U	12,700.0	U
(renamed SB-137)	09/01/1998	soil	18 TO 20	**600.0**		**24,500.0**	
(renamed SB-180)	05/11/1999	soil	18 TO 20	1,000.0	U	10,000.0	U
	12/01/1997	soil	28 TO 30	2,500.0	U	2,500.0	U
(renamed SB-125)	04/27/1998	soil	28 TO 30	1,350.0	U	13,500.0	U
(renamed SB-131)	07/01/1998	soil	28 TO 30	1,300.0	U	**1,600.0**	**J**
(renamed SB-137)	09/01/1998	soil	28 TO 30	1,000.0	U	12,500.0	U
(renamed SB-180)	05/11/1999	soil	28 TO 30	1,000.0	U	10,000.0	U
MW-124							
	12/01/1997	soil	8 TO 10	2,300.0	U	2,300.0	U
(renamed SB-126)	04/27/1998	soil	8 TO 10	1,150.0	U	11,500.0	U
(renamed SB-132)	07/01/1998	soil	8 TO 10	12,000.0	U	**5,500.0**	**J**
(renamed SB-138)	09/01/1998	soil	8 TO 10	**2,000.0**		11,800.0	U
(renamed SB-181)	05/11/1999	soil	8 TO 10	1,000.0	U	10,000.0	U
	12/01/1997	soil	18 TO 20	2,300.0	U	2,300.0	U
(renamed SB-126)	04/27/1998	soil	18 TO 20	1,150.0	U	11,500.0	U
(renamed SB-132)	07/01/1998	soil	18 TO 20	1,200.0	U	11,600.0	U
(renamed SB-138)	09/01/1998	soil	18 TO 20	**90.0**		11,300.0	U
(renamed SB-181)	05/11/1999	soil	18 to 20	1,000.0	U	10,000.0	U
	12/01/1997	soil	28 TO 30	2,300.0	U	2,300.0	U
(renamed SB-126)	04/27/1998	soil	28 TO 30	1,140.0	U	**22,900.0**	
(renamed SB-132)	07/01/1998	soil	28 TO 30	1,300.0	U	12,900.0	U
(renamed SB-138)	09/01/1998	soil	28 TO 30	**500.0**		12,600.0	U
(renamed SB-181)	05/11/1999	soil	28 TO 30	1,000.0	U	10,000.0	U

All results in ppb

Kelly Air Force Base
San Antonio, Texas
TPH Soil Results

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	Naphtha	Gasoline	Mineral Oil	Stoddard Solvent	Paint Thinner	Jet Fuel #4	Jet Fuel #5	Kerosene	Diesel	Heavy Oil	GRO	DRO
MW-007															
(renamed SB-123)	12/01/1997	soil	8 TO 10	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.1 U	NA	NA
(renamed SB-130)	04/28/1998	soil	8 TO 10	NA	2,784,980.0	NA NA	NA	NA	2,237,100.0 U	3,007,900.0 D	NA	2,237,100.0 U	NA	NA	NA
(renamed SB-136)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	3,900.0 J	NA	NA	NA	1,100.0 U	11,500.0 J
(renamed SB-123)	12/01/1997	soil	18 TO 20	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.1 U	NA	NA
(renamed SB-130)	04/28/1998	soil	18 TO 20	NA	6,360.0 U	NA	NA	NA	12,700.0 U	8,700.0 F	NA	12,700.0 U	NA	NA	NA
(renamed SB-136)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	11,600.0 U	NA	NA	NA	1,200.0 U	11,600.0 U
(renamed SB-123)	11/28/1997	soil	28 TO 30	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	9.9 U	NA	NA
(renamed SB-130)	04/28/1998	soil	28 TO 30	NA	1,516,990.0 U	NA	NA	NA	121,400.0 U	85,400.0 FD	NA	121,400.0 U	NA	NA	NA
(renamed SB-136)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	3,100.0 J	NA	NA	NA	782,200.0 U	12,500.0 U
MW-119											NA		NA	NA	NA
	12/01/1998	soil	8 TO 10	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	20.9 D	9.1 U	9.1 U	NA	NA
(renamed SB-129)	04/27/1998	soil	8 TO 10	NA	263.7 DU	NA	NA	NA	572,700.0 U	360,400.0 FD	NA	NA	U	NA	NA
(renamed SB-135)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	13,900.0	NA	NA	NA	1,100.0 U	11,400.0 U
	12/01/1998	soil	18 TO 20	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.1 U	NA	NA
(renamed SB-129)	04/27/1998	soil	18 TO 20	NA	1,160.0 U	NA	NA	NA	11,600.0 U	11,600.0 U	NA	NA	NA	NA	NA
(renamed SB-135)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	12,000.0 U	NA	NA	NA	1,200.0 U	12,000.0 U
	12/01/1998	soil	28 TO 30	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	8.6 U	NA	NA
(renamed SB-129)	04/27/1998	soil	28 TO 30	NA	1,060.0 U	NA	NA	NA	10,600.0	10,600.0	NA	NA	NA	NA	NA
(renamed SB-135)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	11,800.0 U	NA	NA	NA	1,200.0 U	11,800.0 U
MW-120														NA	NA
	11/28/1997	soil	9 TO11	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.3 U	NA	NA
(renamed SB-127)	04/27/1998	soil	8 TO 10	NA	1,140.0 U	NA	NA	NA	11,400.0	3,800.0 F	NA	NA	NA	NA	NA
(renamed SB-133)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	11,700.0 U	NA	NA	NA	1,200.0 U	11,700.0 U
	11/28/1997	soil	18 TO 19	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.1 U	NA	NA
(renamed SB-127)	04/28/1998	soil	18 TO 20	NA	1,240.0 U	NA		NA	12,400.0	12,400.0	NA	NA	NA	NA	NA
(renamed SB-133)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	10,900.0 U	NA	NA	NA	1,100.0 U	10,900.0 U
	11/27/1998	soil	28 TO 30	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10.0 U	NA	NA
(renamed SB-127)	04/27/1998	soil	20 to 30	NA	1,220.0 U	NA	NA	NA	12,200.0 U	3,500.0 F	NA	NA	NA	NA	NA
(renamed SB-133)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	12,600.0 U	NA	NA	NA	1,300.0 U	12,600.0 U
	11/28/1998	soil	39 TO 40	2.4 NA	2.4 U	2.4 U U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	9.7 U	NA	NA
MW-121														NA	NA
	11/28/1997	soil	8 TO 10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	35.3 D	5.0 U	19.9 U	NA	NA
(renamed SB-128)	04/27/1998	soil	8 TO 10	NA	11,800.0	NA	NA	NA	11,800.0 U	11,800.0 U	NA	NA	NA	NA	NA
(renamed SB-134)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	220,300.0 JD	NA	NA	NA	1,052,050.0	243,900.0 U
	11/28/1997	soil	18 TO 20	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	50.0 D	4.8 U	19.0 U	NA	NA
(renamed SB-128)	04/27/1998	soil	18 TO 20	NA	11,600.0 U	NA	NA	NA	11,600.0 U	11,600.0 U	NA	NA	NA	NA	NA
(renamed SB-134)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	24,900.0	NA	NA	NA	148,100.0 U	11,800.0 U
	11/28/1997	soil	28 TO 30	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	3.4	10.0 U	2.5 U	NA	NA
(renamed SB-134)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	1,548,100.0 D	NA	NA	NA	1,655,600.0 U	1,324,500.0 U
MW-122														NA	NA
	12/01/1997	soil	8 TO 10	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	9.0 U	NA	NA
(renamed SB-125)	04/27/1998	soil	8 TO 10	NA	1,474,060.0 DU	NA	NA	NA	11,800.0 U	28,100.0 U	NA	NA	NA	NA	NA
(renamed SB-131)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	99,000.0 D	NA	NA	NA		22,300.0 U
	12/01/1997	soil	18 TO 20	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	9.4 U	NA	NA
(renamed SB-125)	04/27/1998	soil	18 TO 20	NA	1,350.0 U	NA	NA	NA	15,100.0 U	15,100.0 U	NA	NA	NA	NA	NA
(renamed SB-131)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	12,700.0 U	NA	NA	NA	1,300.0 U	12,700.0 U
	12/01/1997	soil	28 TO 30	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10.0 U	NA	NA
(renamed SB-125)	04/27/1998	soil	28 TO 30	NA	1,150.0 U	NA	NA	NA	13,500.0 U	13,500.0 U	NA	NA	NA	NA	NA
(renamed SB-131)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	1,600.0 J	NA	NA	NA	1,300.0 U	13,100.0 U
MW-124														NA	NA
	12/01/1997	soil	8 TO 10	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.3 U	NA	NA
(renamed SB-126)	04/27/1998	soil	8 TO 10	NA	NA	NA	NA	NA	11,500.0 U	11,500.0 U	NA	NA	NA	NA	NA
(renamed SB-132)	07/01/1998	soil	8 TO 10	NA	NA	NA	NA	NA	NA	5,500.0 J	NA	NA	NA	1,200.0 U	12,200.0 U
	12/01/1997	soil	18 TO 20	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	6.0	2.3 U	9.3 U	NA	NA
(renamed SB-126)	04/27/1998	soil	18 TO 20	NA	1,150.0 U	NA	NA	NA	11,500.0 U	11,500.0 U	NA	NA	NA	NA	NA
(renamed SB-132)	07/01/1998	soil	18 TO 20	NA	NA	NA	NA	NA	NA	11,600.0 U	NA	NA	NA	1,200.0 U	11,600.0 U
	12/01/1997	soil	28 TO 30	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.2 U	NA	NA
(renamed SB-126)	04/27/1998	soil	28 TO 30	NA	1,140.0 U	NA	NA	NA	11,400.0 U	22,900.0	NA	NA	NA	NA	NA
(renamed SB-132)	07/01/1998	soil	28 TO 30	NA	NA	NA	NA	NA	NA	12,900.0 U	NA	NA	NA	1,300.0 U	12,900.0 U

Kelly Air Force Base
San Antonio, Texas
TPH Soil Results

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	Naphtha	Gasoline	Mineral Oil	Stoddard Solvent	Paint Thinner	Jet Fuel #4	Jet Fuel #5	Kerosene	Diesel	Heavy Oil	GRO	DRO
SB-118				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/1997	soil	8 TO 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/1997	soil	18 TO 20	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	9.3 U	NA	NA
	12/01/1998	soil	28 TO 30	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	10.0 U	NA	NA
EB-1				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/27/1998	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NI				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/27/1998	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AB-1				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/24/1997	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/27/1998	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/01/1998	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	490	NA
TB-1				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/24/1997	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/27/1998	water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.
D - The compound was found in an analysis at at a secondary dilution factor.
F - The analyte was positively identified but the associted numerical value is below the reporting limit.
E - Concentration exceeded the calibration range of the instrument.
B- The analyte was found in the associted blank, as well as in the sample.
I - Value was obtained from a 1:25,000 dilution
& - Value was obtained from a 1:1000 dilution.
NA - The analyte was not analyzed for this compound.
All units are ug/kg or ug/l (ppb).

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	Dichloro-difluoro-methane	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane	1,1 Di-chloro-ethene	Methylene chloride	Trans-1,2 dichloro-ethene	1,1 Di-chloro-ethane	2,2 Di-chloro-propane	Cis-1,2 Di-chloro-ethene	Bromo-chloro-methane	Chloroform	1,1,1-Tri-chloro ethane	Carbon Tetra Chloride
MW-007																			
(renamed SB-123)	12/01/1997	soil	8 TO 10	28.0 U	40 U	51.0 U	28.0 U	28.0 U	23.0 U	34.0 U	78.0 BD	17.0 U	11.0 U	114.0 U	6.0 FD	11.0 U	11.0 U	23.0 U	57.0 U
(renamed SB-130)	04/28/1998	soil	8 TO 10	28.0 U	39.0 U	51.0 U	28.0 U	28.0 U	23 U	17.0 FD	66.0 D	27.0 D	504.0 D	112.0 U	23,961.0 D	11.0 U	11.0 U	301.0 D	56.0 U
(renamed SB-136)	07/01/1998	soil	8 TO 10	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	2.0 U	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-142)	09/02/1998	soil	8 TO 10	6.0 U	9.0 U	6.0 U	6.0 U	6.0 U	5.0 U	8.0 U	3.0 U	4.0 U	8.0 U	25.0 U	2.0 J	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-185	05/11/1999	soil	8 TO 10	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	10.0	2.0 U	2.0 U	4.0 U	10.0 U
(renamed SB-123)	12/01/1997	soil	18 TO 20	6.0 U	8.0 U	6.0 F	6.0 U	6.0 U	5.0 U	7.0 U	22.0 B	8.0	22.0	23.0 U	1,148.0 D	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-130)	04/28/1998	soil	18 TO 20	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	22.0	3.0 F	78.0	25.0 U	2,604.0	3.0 U	3.0 U	2.0 F	13.0 U
(renamed SB-136)	07/01/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7 U	2.0 U	4.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-142)	09/02/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7 U	52.0	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-185)	05/11/1999	soil	18 TO 20	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	7.2	2.0 U	2.0 U	4.0 U	10.0 U
(renamed SB-123)	11/28/1997	soil	28 TO 30	6.0 U	9.0 U	92.0	6.0 U	6.0 U	2.0 F	3.0 F	8.0 B	12.0	4.0	25.0 U	1,565.0 D	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-130)	04/28/1998	soil	28 TO 30	31.0 U	43 U	55.0 U	31.0 U	31.0 U	24.0 U	42.0 D	91.0 D	8.0 FD	23.0 D	122.0 U	1,220.0 ED	12.0 U	47.0 D	228.0 D	61.0 U
(renamed SB-136)	07/01/1998	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	3.0 U	4.0 U	3.0 U	25.0 U	4.0 F	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-142)	09/02/1998	soil	28 TO 30	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	29.0	4.0 U	2.0 U	24.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-185)	05/11/1999	soil	28 TO 30	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	14.7	2.0 U	2.0 U	4.0 U	10.0 U
MW-119																			
	12/01/1997	soil	8 TO 10	28.0 U	28.0 U	51.0 U	28.0 U	28.0 U	23.0 U	34.0 U	68.0 BD	17.0 U	11.0 U	112.0 U	35.0 D	11.0 U	11.0 U	23.0 U	56.0 U
(renamed SB-129)	04/27/1998	soil	8 TO 10	29.0 U	40.0 U	52.0 U	29.0 U	29.0 U	23.0 U	35.0 U	73.0 D	17.0 U	12.0 U	115.0 U	14.0 F	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-135)	07/01/1998	soil	8 TO 10	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	2.0 U	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	11.0 U
(renamed SB-141)	09/02/1998	soil	8 TO 10	28.0 U	39.0 U	51.0 U	28.0 U	28.0 U	23.0 U	34.0 U	12.0	17.0 U	11.0 U	112.0 U	34.0 U	11.0 U	11.0 U	23.0 U	56.0 U
(renamed SB-184)	05/11/1999	soil	8 TO 10	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	36.8	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	18 TO 20	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	21.0 B	4.0 U	5.0	25.0 U	388.0 ED	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-129)	04/27/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	10.0	4.0 U	2.0 U	23.0 U	2.0 F	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-135)	07/01/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	40.0	4.0 U	2.0 U	24.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-141)	09/02/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	26.0	3.0 U	2.0 U	23.0 U	4.0 J	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-184)	05/11/1999	soil	18 TO 20	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	5.6	15.7	20.0 U	781.0	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	28 TO 30	27.0 U	38.0 U	48.0 U	27.0 U	27.0 U	22.0 U	32.0 U	66.0 BD	16.0 U	11.0 U	108.0 U	18.0 FD	11.0 U	11.0 U	22.0 U	54.0 U
(renamed SB-129)	04/27/1998	soil	28 TO 30	5.0 U	7.0 U	10.0 U	5.0 U	5.0 U	4.0 U	6.0 U	8.0	3.0 U	2.0 U	21.0 U	1.0 F	2.0 U	2.0 U	4.0 U	11.0 U
(renamed SB-135)	07/01/1998	soil	28 TO 30	6.0 U	8.0 U	3.0 F	6.0 U	6.0 U	5.0 U	7.0 U	27.0	4.0 U	2.0 U	24.0 U	49.0	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-141)	09/02/1998	soil	28 TO 30	5.0 U	7.0 U	10.0 U	5.0 U	5.0 U	4.0 U	6.0 U	19.0	3.0 U	2.0 U	21.0 U	14.0	2.0 U	2.0 U	4.0 U	11.0 U
(renamed SB-184)	05/11/1999	soil	28 TO 30	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	3.0 U	2.0 U	2.0 U	4.0 U	10.0 U
MW-120																			
	11/28/1997	soil	9 TO11	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	7.0 B	4.0 U	2.0 U	23.0 U	2.0 F	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-127)	04/27/1998	soil	8 TO 10	6.0 U	8.0 U	10.0 U	6.0 U	6 U	5.0 U	7.0 U	13.0	3.0 U	2.0 U	23.0 U	4.0 F	2.0 U	2.0 U	5.0 U	11.0 U
(renamed SB-133)	07/01/1998	soil	8 TO 10	6 U	8 U	11 U	6 U	6 U	5 U	7 U	35.0	4.0 U	2.0 U	23.0 U	15.0	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-139)	09/02/1998	soil	8 TO 10	6 U	8 U	10 U	6 U	6 U	5 U	7 U	66.0	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-182)	05/11/1999	soil	8 TO 10	5 U	5 U	9 U	5 U	5 U	4 U	6 U	2.0 U	3.0 U	2.0 U	20.0 U	16.6	2.0 U	2.0 U	4.0 U	10.0 U
	11/28/1997	soil	18 TO 19	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	7.0 B	3.0 U	5.0	23.0 U	5.0 F	2.0 U	2.0 U	5.0 U	11.0 U
(renamed SB-127)	04/28/1998	soil	18 TO 20	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	11.0	4.0 U	3.0 U	25.0 U	5.0 F	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-133)	07/01/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	4.0 U	7.0 U	32.0	3.0 U	2.0 U	22.0 U	7.0 U	2.0 U	2.0 U	4.0 U	11.0 U
(renamed SB-139)	09/02/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	36.0	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-182)	05/11/1999	soil	18 TO 20	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	58.8	2.0 U	2.0 U	4.0 U	10.0 U
	11/28/1997	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	2.0 F	17.0 B	4.0 U	4.0 U	25.0 U	429.0 E	3.0 U	4.0	5.0 U	13.0 U
(renamed SB-127)	04/27/1998	soil	20 to 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	12.0	4.0 U	2.0 U	24.0 U	50.0	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-133)	07/01/1998	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	34.0	4.0 U	3.0 U	25.0 U	3.0 F	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-139)	09/02/1998	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	34.0 J	4.0 U	3.0 U	25.0 U	25.0	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-182)	05/11/1999	soil	28 TO 30	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	1,160.0	2.0 U	2.0 U	4.0 U	10.0 U
	11/28/1997	soil	39 TO 40	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	18.0 B	4.0 U	2.0 U	24.0 U	5.0 F	2.0 U	2.0 U	5.0 U	12.0 U
MW-121																			
	11/28/1997	soil	8 TO 10	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	36.0 B	4.0 U	8.0 U	23.0 U	161.0 FD	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-128)	04/27/1998	soil	8 TO 10	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	17.0	4.0 U	2.0 U	24.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-134)	07/01/1998	soil	8 TO 10	762 U	1067 U	1372 U	762 U	762 U	610 U	915 U	183.0 F	457.0 U	305.0 U	3,049.0 U	915.0 U	305.0 U	305.0 U	610.0 U	1,524.0 U
(renamed SB-140)	09/02/1998	soil	8 TO 10	29 U	41 U	52 U	29 U	29 U	23 U	35 U	113.0	17.0 U	12.0 U	116.0 U	21.0 J	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-183)	05/11/1999	soil	8 TO 10	25 U	25 U	509 E	25 U	25 U	20 U	667 E	10.0 U	141.0	1640.0 E	100.0 U	23,900.0 E	10.0 U	10.0 U	570.0	50.0 U
	11/28/1997	soil	18 TO 20	6.0 U	8.0 U	8.0 F	6.0 U	6.0 U	2.0 F	6.0 F	14.0 B	11.0	59.0	24.0 U	3,893.0 D	2.0 U	3.0	5.0	12.0 U
(renamed SB-128)	04/27/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	11.0	4.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-134)	07/01/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	129.0	4.0 U	2.0 U	24.0 U	5.0 F	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-140)	09/02/1998	soil	18 TO 20	29.0 U	41.0 U	52.0 U	29.0 U	29.0 U	23.0 U	35.0 U	98.0	17.0 U	12.0 U	116.0 U	14.0 J	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-183)	05/11/1999	soil	18 TO 20	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	7.5	20.0 U	514.0	2.0 U	2.0 U	4.0 U	10.0 U
	11/28/1997	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	24.0	66.0 B	12.0	8.0	25.0 U	633.0 FD	3.0 U	26.0	5.0 U	13.0 U
(renamed SB-134)	07/01/1998	soil	28 TO 30	822 U	1151 U	1480 U	822 U	822 U	658 U	987 U	301.0 F	493.0 U	329.0 U	3,290.0 U	987.0 U	329.0 U	329.0 U	658.0 U	1,645.0 U
(renamed SB-140)	09/02/1998	soil	28 TO 30	6 U	9 U	11 U	6 U	6 U	5 U	8 U	12.0	4.0 U	3.0 U	25.0 U	2.0 J	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-183)	05/11/1999	soil	28 TO 30	5 U	5 U	9 U	5 U	5 U	4 U	6 U	8.9	3.0 U	2.0 U	20.0 U	45.2	2.0 U	2.0 U	4.0 U	10.0 U

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	Dichloro-difluoro-methane	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane	1,1 Di-chloro-ethene	Methylene chloride	Trans-1,2 dichloro-ethene	1,1 Di-chloro-ethane	2,2 Di-chloro-propane	Cis-1,2 Di-chloro-ethene	Bromo-chloro-methane	Chloroform	1,1,1-Tri-chloro ethane	Carbon Tetra Chloride
MW-122																			
	12/01/1997	soil	8 TO 10	28.0 U	28.0 U	51.0 U	28.0 U	28.0 U	23.0 U	34.0 U	**76.0 BD**	17.0 U	11.0 U	112.0 U	**7.0 FD**	11.0 U	11.0 U	23.0 U	56.0 U
(renamed SB-125)	04/27/1998	soil	8 TO 10	29.0 U	**22.0 FD**	53.0 U	29.0 U	29.0 U	24.0 U	35.0 U	**507.0 D**	18.0 U	12.0 U	118.0 U	**49.0 D**	12.0 U	12.0 U	24.0 U	59.0 U
(renamed SB-131)	07/01/1998	soil	8 TO 10	694 U	972 U	1250 U	694 U	694 U	556 U	833 U	**153.0 F**	417.0 U	278.0 U	2,778.0 U	**236.0 F**	278.0 U	278.0 U	556.0 U	1,389.0 U
(renamed SB-137)	09/01/1998	soil	8 TO 10	17 U	40 U	52 U	29 U	29 U	23 U	35 U	**23.0**	17.0 U	12.0 U	115.0 U	35.0 U	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-180)	05/11/1999	soil	8 TO 10	5 U	5 U	9 U	5 U	5 U	4 U	6 U	2.0 U	3.0 U	3.0 U	20.0 U	**9.2**	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	18 TO 20	29.0 U	29.0 U	53.0 U	29.0 U	29.0 U	24.0 U	35.0 U	**69.0 BD**	18.0 U	12.0 U	118.0 U	**862.0 D**	12.0 U	12.0 U	24.0 U	59.0 U
(renamed SB-125)	04/27/1998	soil	18 TO 20	38.0 U	53.0 U	68.0 U	38.0 U	38.0 U	30.0 U	46.0 U	**630.0 D**	23.0 U	15.0 U	152.0 U	**18.0 FD**	15.0 U	15.0 U	30.0 U	76.0 U
(renamed SB-131)	07/01/1998	soil	18 TO 20	6 U	9 U	11 U	6 U	6 U	5 U	8 U	**62.0**	4.0 U	3.0 U	25.0 U	**12.0**	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-137)	09/01/1998	soil	18 TO 20	3 U	8 U	10 U	6 U	6 U	5 U	7 U	**48.0**	3.0 U	2.0 U	23.0 U	**3.0 J**	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-180)	05/11/2009	soil	18TO 20	5 U	5 U	9 U	5 U	5 U	4 U	6 U	**4.4**	3.0 U	2.0 U	20.0 U	**79.1**	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	8.0 U	**24.0 B**	4.0 U	4.0 U	25.0 U	**6.0 FD**	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-125)	04/27/1998	soil	28 TO 30	34.0 U	47.0 U	61.0 U	34.0 U	34.0 U	27.0 U	41.0 U	**574.0 D**	20.0 U	14.0 U	135.0 U	**1,271.0 D**	14.0 U	14.0 U	27.0 U	68.0 U
(renamed SB-131)	07/01/1998	soil	28 TO 30	7 U	9 U	12 U	7 U	7 U	5 U	8 U	**32.0**	4.0 U	3.0 U	26.0 U	**5.0 F**	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-137)	09/01/1998	soil	28 TO 30	6 U	9 U	11 U	6 U	6 U	5 U	8 U	**62.0**	4.0 U	3.0 U	25.0 U	**38.0**	3.0 U	3.0 U	5.0 U	12.0 U
(renamed SB-180)	05/11/1999	soil	28 TO 30	5 U	5 U	9 U	5 U	5 U	4 U	6 U	2.0 U	3.0 U	2.0 U	20.0 U	**74.2**	2.0 U	2.0 U	4.0 U	10.0 U
MW-124																			
	12/01/1997	soil	8 TO 10	29.0 U	41 U	52.0 U	29.0 U	29.0 U	23.0 U	35.0 U	**76.0 BD**	17.0 U	12.0 U	116.0 U	**14.0 FD**	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-126)	04/27/1998	soil	8 TO 10	29.0 U	40.0 U	52.0 U	29.0 U	29.0 U	23.0 U	35.0 U	**424.0 D**	17.0 U	**6.0 FD**	115.0 U	**107.0 D**	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-132)	07/01/1998	soil	8 TO 10	31.0 U	43.0 U	55.0 U	31.0 U	31.0 U	24.0 U	37.0 U	**537.0 D**	18.0 U	12.0 U	122.0 U	37.0 U	12.0 U	12.0 U	24.0 U	61.0 U
(renamed SB-138)	09/01/1998	soil	8 TO 10	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	**9.0**	4.0 U	2.0 U	24.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-181)	05/11/1999	soil	8 TO 10	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	6.0 U	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	**27.0 B**	4.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-126)	04/27/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	**8.0**	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-132)	07/01/1998	soil	18 TO 20	6.0 U	8.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	2.0 U	4.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	12.0 U
(renamed SB-138)	09/01/1998	soil	18 TO 20	6.0 U	8.0 U	10.0 U	6.0 U	6.0 U	5.0 U	7.0 U	2.0 U	3.0 U	2.0 U	23.0 U	7.0 U	2.0 U	2.0 U	5.0 U	11.0 U
(renamed SB-181)	05/11/1999	soil	18 TO 20	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	**19.9**	2.0 U	2.0 U	4.0 U	10.0 U
	12/01/1997	soil	28 TO 30	6.0 U	40.0 U	**8.0**	29.0 U	29.0 U	23.0 U	35.0 U	**102.0 BD**	17.0 U	12.0 U	116.0 U	**164.0 D**	12.0 U	12.0 U	23.0 U	58.0 U
(renamed SB-126)	04/27/1998	soil	28 TO 30	28.0 U	40.0 U	51.0 U	28.0 U	28.0 U	23.0 U	34.0 U	**525.0 D**	17.0 U	11.0 U	114.0 U	34.0 U	11.0 U	11.0 U	23.0 U	57.0 U
(renamed SB-132)	07/01/1998	soil	28 TO 30	6.0 U	9.0 U	12.0 U	6.0 U	6.0 U	5.0 U	8.0 U	**56.0**	4.0 U	3.0 U	26.0 U	8.0 U	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-138)	09/01/1998	soil	28 TO 30	6.0 U	9.0 U	**66.0**	6.0 U	6.0 U	5.0 U	8.0 U	**61.0**	4.0 U	3.0 U	25.0 U	**534.0 ***	3.0 U	3.0 U	5.0 U	13.0 U
(renamed SB-181)	05/11/1999	soil	28 TO 30	5.0 U	5.0 U	9.0 U	5.0 U	5.0 U	4.0 U	6.0 U	2.0 U	3.0 U	2.0 U	20.0 U	**22.4**	2.0 U	2.0 U	4.0 U	10.0 U
SB-118																			
	11/28/1997	soil	8 TO 10	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	7.0 U	**21.0 B**	**13.0**	3.0 U	25.0 U	**2,914.0 D**	3.0 U	3.0 U	5.0 U	12.0 U
	11/28/1997	soil	18 TO 20	29.0 U	41.0 U	52.0 U	29.0 U	29.0 U	23.0 U	35.0 U	**86.0 BD**	17.0 U	12.0 U	116.0 U	**325.0 D**	12.0 U	12.0 U	23.0 U	58.0 U
	12/01/1997	soil	28 TO 30	6.0 U	9.0 U	11.0 U	6.0 U	6.0 U	5.0 U	**5.0 F**	**21.0 B**	4.0 U	3.0 U	25.0 U	**222.0 FD**	3.0 U	**6.0**	5.0 U	13.0 U

Notes:
U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.
D - The compound was found in an analysis at at a secondary dilution factor.
F - The analyte was positively identified but the associted numerical value is below the reporting limit.
E - Concentration exceeded the calibration range of the instrument.
B- The analyte was found in the associted blank, as well as in the sample.
! - Value was obtained from a 1:25,000 dilution
& - Value was obtained from a 1:1000 dilution.
* - all results are in mg/l
NA - The analyte was not analyzed for this compound.
All units are ug/kg or ug/l (ppb).

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	1,1-Di Chloro propene	Benzene	1,2-Di chloro-ethane	Tri-chloro-ethene	1,2-Di-chloro-propane	Dibromo-methane	Bromo-dichloro-methane	Cis-1,3-dichloro-propene	Toluene	Trans-1,3-dichloro-propene	1,1,2-Tri chloro-ethane	1-Chloro-hexane	Tetra-chloro-ethene	1,3,-Di-chloro-propane	Dibromo-chloro-methane
MW-007																		
(renamed SB-123)	12/01/1997	soil	8 TO 10	28.0 U	11.0 U	17 U U	**31.0** FD	11.0 U	57.0 U	23.0 U	28.0 U	28.0 U	28.0 U	28.0 U	17.0 U	40.0 U	11.0 U	17.0 U
(renamed SB-130)	04/28/1998	soil	8 TO 10	28.0 U	**150.0** D	17 U U	**316,742.0** D!	11.0 U	56.0 U	23.0 U	28.0 U	**67,388.0** D	28.0 U	28.0 U	17.0 U	**892.0** D	11.0 U	17.0 U
(renamed SB-136)	07/01/1998	soil	8 TO 10	6.0 U	2.0 U	3.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-142)	09/02/1998	soil	8 TO 10	6.0 U	3.0 U	4.0 U	13.0 U	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-185)	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
(renamed SB-123)	12/01/1997	soil	18 TO 20	6.0 U	**2.0** F	**2.0** F	**189.0**	2.0 U	12.0 U	5.0 U	6.0 U	**10.0**	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-130)	04/28/1998	soil	18 TO 20	6.0 U	**7.0**	**7.0**	**2,217.0**	3.0 U	13.0 U	5.0 U	6.0 U	**347.0** F	6.0 U	6.0 U	4.0 U	**7.0** F	3.0 U	4.0 U
(renamed SB-136)	07/01/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-142)	09/02/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-185)	05/11/1999	soil	18 TO 20	5.0 U	3.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
(renamed SB-123)	11/28/1997	soil	28 TO 30	6.0 U	**2.0** F	4 U U	**104.0**	3.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	**2.0** F	3.0 U	4.0 U
(renamed SB-130)	04/28/1998	soil	28 TO 30	31.0 U	**88.0** D	18 U U	**118,918.0** D!	12.0 U	61.0 U	24.0 U	31.0 U	**6,875.0** D	31.0 U	31.0 U	18.0 U	**275.0** D	12.0 U	18.0 U
(renamed SB-136)	07/01/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**4.0** F	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-142)	09/02/1998	soil	28 TO 30	6.0 U	2.0 U	4.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-185)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
MW-119																		
	12/01/1997	soil	8 TO 10	28.0 U	11.0 U	17 U U	**60.0** D!	11.0 U	56.0 U	23.0 U	28.0 U	**386.0** D	28.0 U	28.0 U	17.0 U	**29.0** FD	11.0 U	17.0 U
(renamed SB-129)	04/27/1998	soil	8 TO 10	29.0 U	12.0 U	17 U U	**213.0** D!	12.0 U	58.0 U	23.0 U	29.0 U	**800.0** D	29.0 U	29.0 U	17.0 U	**54.0** D	12.0 U	17.0 U
(renamed SB-135)	07/01/1998	soil	8 TO 10	6.0 U	2.0 U	3.0 U	**4.0** F	2.0 U	11.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-141)	09/02/1998	soil	8 TO 10	28.0 U	11.0 U	17.0 U	39.0 U	11.0 U	56.0 U	23.0 U	28.0 U	28.0 U	28.0 U	28.0 U	17.0 U	39.0 U	11.0 U	17.0 U
(renamed SB-184)	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	**19.1**	2.0 U	10.0 U	4.0 U	5.0 U	**95.0**	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	18 TO 20	6.0 U	3.0 U	**5.0** F	13.0	3.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	**5.0** F	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-129)	04/27/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	12.0	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-135)	07/01/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-141)	09/02/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-184)	05/11/1999	soil	18 TO 20	5.0 U	2.0 U	3.0 U	**39.4**	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	28 TO 30	27.0 U	11.0 U	16.0 U	54.0	11.0 U	54.0 U	22.0 U	27.0 U	27.0 U	27.0 U	**22.0** U	16.0 U	38.0 U	11.0 U	16.0 U
(renamed SB-129)	04/27/1998	soil	28 TO 30	5.0 U	2.0 U	3.0 U	11.0	2.0 U	11.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3 U U	7.0 U	2.0 U	3.0 U
(renamed SB-135)	07/01/1998	soil	28 TO 30	6.0 U	2.0 U	4.0 U	**1.0** F	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-141)	09/02/1998	soil	28 TO 30	5.0 U	2.0 U	3.0 U	11.0 U	2.0 U	11.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
(renamed SB-184)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
MW-120																		
	11/28/1997	soil	9 TO11	6.0 U	2.0 U	4.0 U	12.0 U	2 U U	12.0 U	4.0 U	6.0 U	**6.0** F	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-127)	04/27/1998	soil	8 TO 10	6.0 U	2.0 U	3.0 U	11.0 U	2 U U	11.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-133)	07/01/1998	soil	8 TO 10	6.0 U	2.0 U	4.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-139	09/02/1998	soil	8 TO 10	6.0 U	2.0 U	2.0 U	**3.0** J	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-182)	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	11/28/1997	soil	18 TO 19	6.0 U	2.0 U	3.0 U	11.0	2 U U	11.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-127)	04/28/1998	soil	18 TO 20	6.0 U	3.0 U	4.0 U	**4.0** FD	3 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-133)	07/01/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	11.0 U	2.0 U	11.0 U	4.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-139)	09/02/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-182)	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	11/27/1997	soil	28 TO 30	6.0 U	**5.0**	4.0 U	**381.0** FD	3 U U	13.0 U	5.0 U	6.0 U	**66.0**	6.0 U	**14.0**	4.0 U	**1.0** F	3.0 U	4.0 U
(renamed SB-127)	04/27/1998	soil	28 TO 30	6.0 U	2.0 U	4.0 U	**4.0** FD	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	2.0 U	4.0 U
(renamed SB-133)	07/01/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**15.0**	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-139)	09/02/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**25.0**	3.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-182)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	**894.0**	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	11/28/1997	soil	39 TO 40	6.0 U	2.0 U	4.0 U	**9.0** FD	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	2.0 U	2.0 U
MW-121																		
	11/28/1997	soil	8 TO 10	6.0 U	3.0 U	4.0 U	**6,609.0** D!	3 U U	13.0 U	5.0 U	6.0 U	**4,752.0** D	6.0 U	**47.0**	4.0 U	**117.0**	3.0 U	4.0 U
(renamed SB-128)	04/27/1998	soil	8 TO 10	6.0 U	2.0 U	4.0 U	12.0 U	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-134)	07/01/1998	soil	8 TO 10	762.0 U	305.0 U	457.0 U	**10,031.0** B	305.0 U	1,524.0 U	610.0 U	762.0 U	**6,599.0**	762.0 U	762.0 U	457.0 U	**495.0** F	305.0 U	457.0 U
(renamed SB-140)	09/02/1998	soil	8 TO 10	29.0 U	12.0 U	17.0 U	58.0 U	12.0 U	58.0 U	23.0 U	29.0 U	29.0 U	29.0 U	29.0 U	17.0 U	41.0 U	12.0 U	17.0 U
(renamed SB-183	05/11/1999	soil	8 TO 10	25.0 U	**204.0**	15.0 U	**80,000.0** D	10.0 U	50.0 U	20.0 U	25.0 U	**11,300.0** D	25.0 U	**173.0**	15.0 U	**599.0** E	10.0 U	15.0 U
	11/28/1997	soil	18 TO 20	6.0 U	**6.0**	4.0 U	**6,790.0** D!	2 U U	12.0 U	5.0 U	6.0 U	**833.0** D	6.0 U	**51.0**	4.0 U	**16.0**	2.0 U	4.0 U
(renamed SB-128)	04/27/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	12.0 U	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6 U U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-134)	07/01/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	**24.0**	2.0 U	12.0 U	5.0 U	6.0 U	**4.0** F	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-140)	09/02/1998	soil	18 TO 20	29.0 U	12.0 U	12.0 U	**43.0** J	12.0 U	58.0 U	23.0 U	29.0 U	**14.0** J	29.0 U	29.0 U	17.0 U	41.0 U	12.0 U	17.0 U
(renamed SB-183)	05/11/1999	soil	18 TO 20	5.0 U	2.0 U	3.0 U	**3,120.0**	2.0 U	10.0 U	4.0 U	5.0 U	**434.0**	**5.6**	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	11/28/1997	soil	28 TO 30	6.0 U	**19.0**	**8.0**	**4,467.0** D!	3 U U	13.0 U	5.0 U	6.0 U	**203.0**	6.0 U	**63.0**	4.0 U	**5.0** F	3.0 U	4.0 U
(renamed SB-134)	07/01/1998	soil	28 TO 30	822.0 U	329.0 U	493.0 U	**21,630.0** B	329.0 U	1,645.0 U	658.0 U	822.0 U	**1,380.0**	822.0 U	822.0 U	493.0 U	1,151.0 U	329.0 U	493.0 U
(renamed SB-140)	09/02/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**1,929.0** *	3.0 U	13.0 U	5.0 U	6.0 U	**32.0**	6.0 U	**5.0** J	4.0 U	**3.0** J	3.0 U	4.0 U
(renamed SB-183)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	**2,030.0** E	2.0 U	10.0 U	4.0 U	5.0 U	**131.0**	5.0 U	**9.1**	3.0 U	7.0 U	2.0 U	3.0 U

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	1,1-Di - Chloro propene	Benzene	1,2-Di chloro-ethane	Tri-chloro-ethene	1,2-Di-chloro-propane	Dibromo-methane	Bromo-dichloro-methane	Cis-1,3-dichloro-propene	Toluene	Trans-1,3-dichloro-propene	1,1,2-Tri chloro-ethane	1-Chloro-hexane	Tetra-chloro-ethene	1,3,-Di-chloro-propane	Dibromo-chloro-methane
MW-122																		
	12/01/1997	soil	8 TO 10	28.0 U	11.0 U	17.0 U	**58.0 D!**	11 U U	56.0 U	23.0 U	28.0 U	28.0 U	28.0 U	28.0 U	17.0 U	39.0 U	11.0 U	17.0 U
(renamed SB-125)	04/27/1998	soil	8 TO 10	29.0 U	12.0 U	18.0 U	59.0 U	12 U U	59.0 U	24.0 U	29.0 U	**9.0 FD**	29.0 U	29.0 U	18.0 U	41.0 U	12.0 U	18.0 U
(renamed SB-131)	07/01/1998	soil	8 TO 10	694.0 U	278.0 U	417.0 U	1,389.0 U	278.0 U	1,389.0 U	556.0 U	694.0 U	694.0 U	694.0 U	694.0 U	417.0 U	972.0 U	278.0 U	417.0 U
(renamed SB-137)	09/01/1998	soil	8 TO 10	29.0 U	12.0 U	17.0 U	58.0 U	12.0 U	17.0 U	23.0 U	29.0 U	29.0 U	29.0 U	29.0 U	17.0 U	40.0 U	12.0 U	17.0 U
(renamed SB-180)	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	18 TO 20	29.0 U	12.0 U	18.0 U	**9.0 FD**	12 U U	59.0 U	24.0 U	29.0 U	29.0 U	29.0 U	29.0 U	18 U U	41.0 U	12.0 U	18.0 U
(renamed SB-125)	04/27/1998	soil	18 TO 20	38.0 U	15.0 U	23.0 U	76.0 U	15 U U	76.0 U	30.0 U	38.0 U	38.0 U	38.0 U	38.0 U	23.0 U	53.0 U	15.0 U	23.0 U
(renamed SB-131)	07/01/1998	soil	18 TO 20	6.0 U	3.0 U	4.0 U	13.0 U	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-137)	09/01/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-180)	05/11/1999	soil	18 TO 20	5.0 U	2.0 U	3.0 U	7.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	28 TO 30	6.0 U	3.0 U	4.0 U	13.0 U	3 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-125)	04/27/1998	soil	28 TO 30	34.0 U	14.0 U	20.0 U	**59.0 FD**	14 U U	68.0 U	27.0 U	34.0 U	**92.0 D**	34.0 U	34.0 U	20.0 U	47.0 U	14.0 U	20.0 U
(renamed SB-131)	07/01/1998	soil	28 TO 30	7.0 U	3.0 U	4.0 U	13.0 U	3.0 U	13.0 U	5.0 U	7.0 U	7.0 U	7.0 U	7.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-137)	09/01/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**4.0 J**	3.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	**2.0 J**	3.0 U	4.0 U
(renamed SB-180)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
MW-124																		
	12/01/1997	soil	8 TO 10	29.0 U	12.0 U	17.0 U	58.0 U	12 U U	58.0 U	23.0 U	29.0 U	29.0 U	29.0 U	29.0 U	17.0 U	41.0 U	12.0 U	17.0 U
(renamed SB-126)	04/27/1998	soil	8 TO 10	29.0 U	12.0 U	17.0 U	58.0 U	12 U U	58.0 U	23.0 U	29.0 U	29.0 U	29.0 U	29.0 U	17.0 U	40.0 U	12.0 U	17.0 U
(renamed SB-132)	07/01/1998	soil	8 TO 10	31.0 U	12.0 U	18.0 U	**24.0 FD**	12.0 U	61.0 U	24.0 U	31.0 U	31.0 U	31.0 U	31.0 U	18.0 U	43.0 U	12.0 U	18.0 U
(renamed SB-138)	09/01/1998	soil	8 TO 10	6.0 U	2.0 U	4.0 U	12.0 U	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-181	05/11/1999	soil	8 TO 10	5.0 U	2.0 U	3.0 U	7.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	18 TO 20	6.0 U	2.0 U	4.0 U	12.0 U	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-126)	04/27/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	12.0 U	2 U U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-132)	07/01/1998	soil	18 TO 20	6.0 U	2.0 U	4.0 U	**1.0 F**	2.0 U	12.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	8.0 U	2.0 U	4.0 U
(renamed SB-138)	09/01/1998	soil	18 TO 20	6.0 U	2.0 U	3.0 U	11.0 U	2.0 U	11.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	8.0 U	2.0 U	3.0 U
(renamed SB-181)	05/11/1999	soil	18 TO 20	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
	12/01/1997	soil	28 TO 30	29.0 U	12.0 U	17.0 U	58.0 U	12 U U	58.0 U	23.0 U	29.0 U	**62.0 D**	29.0 U	29.0 U	17.0 U	41.0 U	12.0 U	17.0 U
(renamed SB-126)	04/27/1998	soil	28 TO 30	28.0 U	11.0 U	17.0 U	57.0 U	11 U U	57.0 U	23.0 U	28.0 U	28.0 U	28.0 U	28.0 U	17.0 U	40.0 U	11.0 U	17.0 U
(renamed SB-132)	07/01/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**3.0 F**	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-138)	09/01/1998	soil	28 TO 30	6.0 U	3.0 U	4.0 U	**97.0**	3.0 U	13.0 U	5.0 U	6.0 U	6.0 U	6.0 U	6.0 U	4.0 U	9.0 U	3.0 U	4.0 U
(renamed SB-181)	05/11/1999	soil	28 TO 30	5.0 U	2.0 U	3.0 U	10.0 U	2.0 U	10.0 U	4.0 U	5.0 U	5.0 U	5.0 U	5.0 U	3.0 U	7.0 U	2.0 U	3.0 U
SB-118																		
	11/28/1997	soil	8 TO 10	6.0 U	**4.0**	4.0 U	**63.0**	3 U U	12.0 U	**45.0**	6.0 U	**733.0 FD**	6.0 U	**22.0**	4.0 U	**20.0**	3.0 U	4.0 U
	11/28/1997	soil	18 TO 20	29.0 U	12.0 U	17.0 U	**23.0 FD**	12 U U	58.0 U	23.0 U	29.0 U	29.0 U	29 U U	29.0 U	17.0 U	41.0 U	12.0 U	17.0 U
	12/01/1997	soil	28 TO 30	6.0 U	**2.0 F**	**4.0 F**	**819.0 FD**	3 U U	13.0 U	5.0 U	6.0 U	**2.0 F**	6.0 U	**10.0**	4.0 U	**1.0 F**	3.0 U	4.0 U

Notes:
U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.
D - The compound was found in an analysis at at a secondary dilution factor.
F - The analyte was positively identified but the associted numerical value is below the reporting limit.
E - Concentration exceeded the calibration range of the instrument.
B- The analyte was found in the associted blank, as well as in the sample.
! - Value was obtained from a 1:25,000 dilution
& - Value was obtained from a 1:1000 dilution.
* - all results are in mg/l
NA - The analyte was not analyzed for this compound.

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	1,2-Di-bromo-ethane	Chloro-benzene	1,1,1,2-Tetra chloro ethane	Ethyl-benzene	m,p-xylene	o-xylene	Styrene	Bromoform	Isopropyl-benzene	Bromo-benzene	1,1,2,2-Tetrachloro ethane	1,2,3-Tri chloro propane	N-propyl-benzene	2-Chloro-toluene
MW-007																	
(renamed SB-123)	12/01/1997	soil	8 TO 10	17.0 U	11.0 U	17.0 U	17.0 U	40 U	28.0 U	11.0 U	34.0 U	46 U	11.0 U	11.0 U	114.0 U	11.0 U	11.0 U
(renamed SB-130)	04/28/1998	soil	8 TO 10	17.0 U	**249.0 D**	17.0 U	**4,185.0 FD**	**21,376.0 D**	**11,433.0 FD**	11.0 U	34.0 U	**713.0 D**	11.0 U	11.0 U	112.0 U	**9,129.0 D**	11.0 U
(renamed SB-136)	07/01/1998	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-142)	09/02/1998	soil	8 TO 10	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-185)	05/11/1999	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
(renamed SB-123)	12/01/1997	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	**4.0 F**	**2.0 F**	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-130)	04/28/1998	soil	18 TO 20	4.0 U	3.0 U	4.0 U	**12.0**	**66.0**	**35.0**	3.0 U	8.0 U	**6.0 F**	3.0 U	3.0 U	25.0 U	**13.0**	3.0 U
(renamed SB-136)	07/01/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-142)	09/02/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-185)	05/11/1999	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
(renamed SB-123)	11/28/1997	soil	28 TO 30	4.0 U	**13.0**	3.0 U	**2.0 F**	**6.0 F**	**3.0 F**	3.0 U	7.0 U	**3.0 F**	3.0 U	3.0 U	25.0 U	**2.0 F**	3.0 U
(renamed SB-130)	04/28/1998	soil	28 TO 30	18.0 U	12.0 U	18.0 U	**292.0 D**	**2,706.0 FD**	**609.0 D**	12.0 U	37.0 U	**141.0 D**	12.0 U	12.0 U	122.0 U	274.0 U	12.0 U
(renamed SB-136)	07/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-142)	09/02/1998	soil	28 TO 30	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-185)	05/11/1999	soil	28 TO 30	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
MW-119																	
	12/01/1997	soil	8 TO 10	17.0 U	11.0 U	11.0 U	**148.0 D**	**797 D**	**578.0 D**	11.0 U	34.0 U	45 U	11.0 U	11.0 U	112.0 U	11.0 U	11.0 U
(renamed SB-129)	04/27/1998	soil	8 TO 10	17.0 U	**84.0 D**	17.0 U	**220.0 D**	**2,175.0**	**927.0 D**	12.0 U	35.0 U	**282.0 D**	12.0 U	12.0 U	115.0 U	**614.0 D**	12.0 U
(renamed SB-135)	07/01/1998	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-141)	09/02/1998	soil	8 TO 10	17.0 U	11.0 U	17.0 U	17.0 U	**11.0 J**	**9.0 J**	11.0 U	34.0 U	45.0 U	11.0 U	11.0 U	112.0 U	**9.0 J**	11.0 U
(renamed SB-184)	05/11/1999	soil	8 TO 10	3.0 U	**13.4**	3.0 U	**13.7**	**93.5**	**52.0**	2.0 U	6.0 U	**14.8**	2.0 U	**9.3**	20.0 U	**43.4 D**	**24.8 D**
	12/01/1997	soil	18 TO 20	4.0 U	3.0 U	3.0 U	4.0 U	9.0 U	6.0 U	3.0 U	7.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-129)	04/27/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-135)	07/01/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-141)	09/02/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-184)	05/11/1999	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	12/01/1997	soil	28 TO 30	16.0 U	11.0 U	16.0 U	16.0 U	38 U	27.0 U	11.0 U	32.0 U	43 U	11.0 U	11.0 U	108.0 U	11.0 U	11.0 U
(renamed SB-129)	04/27/1998	soil	28 TO 30	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	9.0 U	2.0 U	2.0 U	21.0 U	2.0 U	2.0 U
(renamed SB-135)	07/01/1998	soil	28 TO 30	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-141)	09/02/1998	soil	28 TO 30	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	9.0 U	2.0 U	2.0 U	21.0 U	2.0 U	2.0 U
(renamed SB-184)	05/11/1999	soil	28 TO 30	3.0 U	**8.1**	3.0 U	**4.3**	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	**4.3**	20.0 U	**4.5**	2.0 U
MW-120																	
	11/28/1997	soil	9 TO11	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-127)	04/27/1998	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-133)	07/01/1998	soil	8 TO 10	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-139)	09/02/1998	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-182)	05/11/1999	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	11/28/1997	soil	18 TO 19	3.0 U	2.0 U	3.0 U	3.0 U	**3.0 F**	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-127)	04/28/1998	soil	18 TO 20	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	7.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-133)	07/01/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	22.0 U	2.0 U	2.0 U
(renamed SB-139)	09/02/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-182)	05/11/1999	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	11/27/1997	soil	28 TO 30	4.0 U	3.0 U	4.0 U	**4.0**	**21.0**	**13.0**	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	**3.0**	3.0 U
(renamed SB-127)	04/27/1998	soil	28 TO 30	4.0 U	2.0 U	4.0 U	4.0 U	9.0 U	6.0 U	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-133)	07/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-139)	09/02/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-182)	05/11/1999	soil	28 TO 30	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	11/28/1997	soil	39 TO 40	4.0 U	2.0 U	4.0 U	4.0 U	9.0 U	6.0 U	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
MW-121																	
	11/28/1997	soil	8 TO 10	4 U U	**54.0**	4.0 U	**192.0**	**3,703.0 D**	**2,044.0 D**	3.0 U	8 U U	10.0 U	3.0 U	**117.0**	25.0 U	**250.0 E**	3.0 U
(renamed SB-128)	04/27/1998	soil	8 TO 10	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6 U U	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-134)	07/01/1998	soil	8 TO 10	457.0 U	305.0 U	457.0 U	**811.0**	**4,758.0**	**2,480.0**	350.0 U	915.0 U	1,220.0 U	305.0 U	305.0 U	3,049.0 U	**2,349.0**	305.0 U
(renamed SB-140)	09/02/1998	soil	8 TO 10	17.0 U	12.0 U	17.0 U	17.0 U	**10.0 J**	**10.0 J**	12.0 J	35.0 U	47.0 U	12.0 U	12.0 U	116.0 U	**10.0 J**	12.0 U
(renamed SB-183)	05/11/1999	soil	8 TO 10	15.0 U	**44.7**	15.0 U	**664.0 E**	**3,310.0 E**	**1,360.0 E**	**69.8**	30.0 U	**293.0**	10.0 U	10.0 U	**233.0**	**708.0 E**	**271.0**
	11/28/1997	soil	18 TO 20	4.0 U	2.0 U	2.0 U	**25.0**	**128.0**	**66.0**	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	**30.0**	2.0 U
(renamed SB-128)	04/27/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-134)	07/01/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	**4.0 F**	2.0 U	7.0 U	10.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-140)	09/02/1998	soil	18 TO 20	17.0 U	12.0 U	17.0 U	**6.0 J**	**45.0**	**33.0**	12.0 U	35.0 U	47.0 U	12.0 U	12.0 U	116.0 U	**29.0**	12.0 U
(renamed SB-183)	05/11/1999	soil	18 TO 20	3.0 U	2.0 U	3.0 U	**14.0**	**74.2**	**29.9**	2.0 U	6.0 U	8.0 U	2.0 U	**5.2**	20.0 U	**13.9**	**6.8**
	11/28/1997	soil	28 TO 30	4.0 U	3.0 U	4.0 U	**9.0**	**43.0**	**23.0**	3.0 U	8.0 U	**4.0 F**	3.0 U	3.0 U	25.0 U	**7.0**	3.0 U
(renamed SB-134)	07/01/1998	soil	28 TO 30	493.0 U	329.0 U	493.0 U	**174.0 F**	**1,031.0 F**	**484.0 F**	329.0 U	987.0 U	1,316.0 U	329.0 U	329.0 U	3,290.0 U	**433.0**	329.0 U
(renamed SB-140)	09/02/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	**7.0**	**39.0**	**19.0**	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	**13.0**	3.0 U
(renamed SB-183)	05/11/1999	soil	28 TO 30	3.0 U	2.0 U	3.0 U	**5.3**	**28.3**	**11.3**	**4.0**	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	**4.7**	2.0 U

KELLY AIR FORCE BASE
VOC SOIL RESULTS

Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	1,2-Di-bromo-ethane	Chloro-benzene	1,1,1,2-Tetra chloro ethane	Ethyl-benzene	m,p-xylene	o-xylene	Styrene	Bromoform	Isopropyl-benzene	Bromo-benzene	1,1,2,2-Tetrachloro ethane	1,2,3-Tri chloro propane	N-propyl-benzene	2-Chloro-toluene
MW-122																	
	12/01/1997	soil	8 TO 10	17.0 U	11.0 U	11.0 U	17.0 U	39 U	28.0 U	11.0 U	34.0 U	45 U	11.0 U	11.0 U	112.0 U	11.0 U	11.0 U
(renamed SB-125)	04/27/1998	soil	8 TO 10	18.0 U	73.0 D	18.0 U	18.0 U	24.0 FD	19.0 FD	12.0 U	35.0 U	7.0 FD	12.0 U	12.0 U	118.0 U	17.0 D	12.0 U
(renamed SB-131)	07/01/1998	soil	8 TO 10	417.0 U	278.0 U	417.0 U	417.0 U	972.0 U	694.0 U	278.0 U	833.0 U	1,111.0 U	278.0 U	278.0 U	2,778.0 U	278.0 U	278.0 U
(renamed SB-137)	09/01/1998	soil	8 TO 10	17.0 U	12.0 U	17.0 U	17.0 U	40.0 U	29.0 U	12.0 U	35.0 U	46.0 U	12.0 U	12.0 U	115.0 U	12.0 U	12.0 U
(renamed SB-180)	05/11/1999	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	12/01/1997	soil	18 TO 20	18.0 U	12.0 U	12.0 U	18.0 U	13	7.0 FD	12.0 U	35.0 U	47 U	12.0 U	12.0 U	118.0 U	12.0 U	12.0 U
(renamed SB-125)	04/27/1998	soil	18 TO 20	23.0 U	15.0 U	23.0 U	23.0 U	53.0 U	38.0 U	15.0 U	46.0 U	61.0 U	15.0 U	15.0 U	152.0 U	15.0 U	15.0 U
(renamed SB-131)	07/01/1998	soil	18 TO 20	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-137)	09/01/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-180)	05/11/1999	soil	18 TO 20	3.0 U	3.9	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	12/01/1997	soil	28 TO 30	4.0 U	3.0 U	3.0 U	4.0 U	9.0 U	6.0 U	3.0 U	7.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-125)	04/27/1998	soil	28 TO 30	20.0 U	98.0 D	20.0 U	13.0 FD	63.0 D	38.0 D	14.0 U	41.0 U	14.0 FD	14.0 U	14.0 U	135.0 U	27.0 D	14.0 U
(renamed SB-131)	07/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	7.0 U	3.0 U	8.0 U	11.0 U	3.0 U	3.0 U	26.0 U	2.0 F	3.0 U
(renamed SB-137)	09/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-180)	05/11/1999	soil	28 TO 30	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
MW-124																	
	12/01/1997	soil	8 TO 10	17.0 U	12.0 U	17.0 U	17.0 U	41 U	29.0 U	12.0 U	35.0 U	47 U	12.0 U	12.0 U	116.0 U	12.0 U	12.0 U
(renamed SB-126)	04/27/1998	soil	8 TO 10	17.0 U	12.0 U	17.0 U	17.0 U	40.0 U	29.0 U	12.0 U	35.0 U	46.0 U	12.0 U	12.0 U	115.0 U	12.0 U	12.0 U
(renamed SB-132)	07/01/1998	soil	8 TO 10	18.0 U	12.0 U	18.0 U	18.0 U	43.0 U	31.0 U	12.0 U	37.0 U	49.0 U	12.0 U	12.0 U	122.0 U	12.0 U	12.0 U
(renamed SB-138)	09/01/1998	soil	8 TO 10	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	24.0 U	2.0 U	2.0 U
(renamed SB-181)	05/11/1999	soil	8 TO 10	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	12/01/1997	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-126)	04/27/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-132)	07/01/1998	soil	18 TO 20	4.0 U	2.0 U	4.0 U	4.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-138)	09/01/1998	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	8.0 U	6.0 U	2.0 U	7.0 U	9.0 U	2.0 U	2.0 U	23.0 U	2.0 U	2.0 U
(renamed SB-181)	05/11/1999	soil	18 TO 20	3.0 U	2.0 U	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
	12/01/1997	soil	28 TO 30	17.0 U	84.0 D	17.0 U	29.0	36.0 FD	19.0 FD	12.0 U	35.0 U	47 U	12.0 U	12.0 U	116.0 U	12.0 U	12 U U
(renamed SB-126)	04/27/1998	soil	28 TO 30	17.0 U	11.0 U	17.0 U	17.0 U	40.0 U	28.0 U	11.0 U	34.0 U	46.0 U	11.0 U	11.0 U	114.0 U	11.0 U	11.0 U
(renamed SB-132)	07/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	6.0 U	10.0 U	3.0 U	3.0 U	26.0 U	3.0 U	3.0 U
(renamed SB-138)	09/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	6.0 U	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U
(renamed SB-181)	05/11/1999	soil	28 TO 30	3.0 U	4.4	3.0 U	3.0 U	7.0 U	5.0 U	2.0 U	6.0 U	8.0 U	2.0 U	2.0 U	20.0 U	2.0 U	2.0 U
SB-118																	
	11/28/1997	soil	8 TO 10	4.0 U	16.0	4.0 U	164.0	1,758.0 D	1,174.0 D	3.0 U	7.0 U	112.0	3.0 U	3.0 U	25.0 U	191.0	3.0 U
	11/28/1997	soil	18 TO 20	17.0 U	12.0 U	17.0 U	17.0 U	18 FD	29.0 U	12.0 U	35.0 U	47 U	12.0 U	12.0 U	116.0 U	12.0 U	12.0 U
	12/01/1998	soil	28 TO 30	4.0 U	3.0 U	4.0 U	4.0 U	9.0 U	4.0 F	3.0 U	8.0 U	10.0 U	3.0 U	3.0 U	25.0 U	3.0 U	3.0 U

Notes:
U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.
D - The compound was found in an analysis at at a secondary dilution factor.
F - The analyte was positively identified but the associted numerical value is below the reporting limit.
E - Concentration exceeded the calibration range of the instrument.
B- The analyte was found in the associted blank, as well as in the sample.
! - Value was obtained from a 1:25,000 dilution
& - Value was obtained from a 1:1000 dilution.
* - all results are in mg/l
NA - The analyte was not analyzed for this compound.

KELLY AIR FORCE BASE
VOC SOIL RESULTS

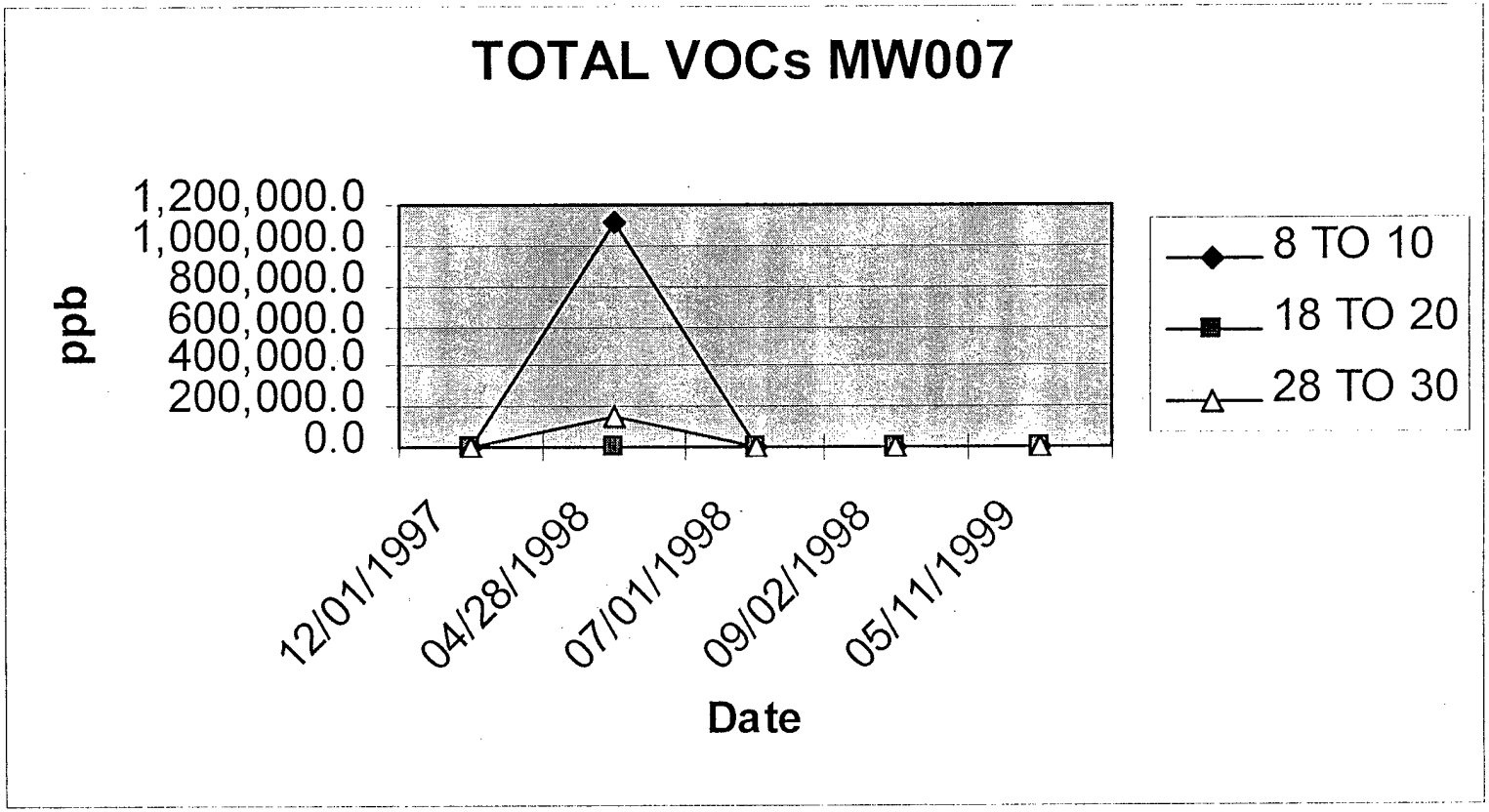
Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	4-Chloro-toluene	1,3,5-Tri-methyl-benzene	Tert-butyl benzene	1,2,4-Tri-methyl-benzene	Sec-butyl benzene	1,3-Di-chloro-benzene	4-Isoproyl-toluene	1,4-Di-chloro-benzene	1,2-Di-chloro-benzene	n-Butyl-benzene	1,2-Di-bromo-3-chloropropane	1,2,4-Tri-chloro-benzene	Hexa-chloro-butadiene	Naphtha-lene	1,2,3-Tri-chloro-benzene	Total VOCS
MW-007																			
(renamed SB-123)	12/01/1997	soil	8 TO 10	17.0 U	17 U	40.0 U	40.0 U	40.0 U	34 U U	34.0 U	11.0 U	11.0 FD	28.0 U	57.0 U	11.0 U	28.0 U	26.0 D	11.0 U	152.0
(renamed SB-130)	04/28/1998	soil	8 TO 10	17.0 U	43,511.0 D	39.0 U	91,096.0 D	993.0 D	14,466.0 FD	29,635.0 D	63,202.0 D	367,612.0 D	28.0 U	56.0 U	204.0 D	28.0 U	39,972.0 D	35.0 D	1,107,859.0
(renamed SB-136)	07/01/1998	soil	8 TO 10	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	5.0
(renamed SB-142)	09/02/1998	soil	8 TO 10	4.0 U	4.0 U	9.0 U	2.0 J	9.0 U	8.0 U	8.0 U	3.0 U	3.0 U	6.0 U	13.0 U	3.0 U	6.0 U	6.0	3.0 U	10.0
(renamed SB-185)	05/11/1999	soil	8 TO 10	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	5.1	5.0 U	10.0 U	2.0 U	5.0 U	2.6	2.0 U	17.7
(renamed SB-123)	12/01/1997	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	5.0 FD	7.0 U	12.0	68.0	6.0 U	12.0 U	2.0 U	6.0 U	18.0	2.0 U	1,518.0
(renamed SB-130)	04/28/1998	soil	18 TO 20	4.0 U	56.0	16.0	137.0	11.0	9.0	31.0	22.0	109.0	27.0	13.0 U	3.0 U	6.0 U	48.0	3.0 U	5,892.0
(renamed SB-136)	07/01/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	0.0
(renamed SB-142)	09/02/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	52.0
(renamed SB-185)	05/11/1999	soil	18 TO 20	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	3.5	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	10.7
(renamed SB-123)	11/28/1997	soil	28 TO 30	4.0 U	4.0 U	9.0 U	7.0 F	4.0 F	7.0 FD	3.0 F	12.0	28.0	6.0 U	12.0 U	4.0	6.0 U	13.0	6.0	1,907.0
(renamed SB-130)	04/28/1998	soil	28 TO 30	18.0 U	709.0 D	43.0 U	7,508.0 D	201.0 D	465 D D	461.0 D	447.0 D	5,503.0 D	453.0 D	61.0 U	12.0 U	31.0 U	548.0 D	12.0 U	147,858.0
(renamed SB-136)	07/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	8.0 U	8.0 U	3.0 U	39.0	6.0 U	13.0 U	3.0 U	6.0 U	3.0 U	3.0 U	47.0
(renamed SB-142)	09/02/1998	soil	28 TO 30	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	29.0
(renamed SB-185)	05/11/1999	soil	28 TO 30	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	3.5	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	18.2
MW-119																			
	12/01/1998	soil	8 TO 10	17.0 U	17 U	39.0 U	39.0 U	39.0 U	34 U U	34.0 U	11.0 U	25,034.0 D	28.0 U	56.0 U	33.0 D	28.0 U	8,872.0 D	11.0 U	36,040.0
(renamed SB-129)	04/27/1998	soil	8 TO 10	17.0 U	9,430.0	40.0 U	20,453.0	478.0 D	35 U U	7,070.0	842.0 D	24,060.0	734.0 D	58.0 U	66.0 D	29.0 U	7,621.0	11.0 FD	76,221.0
(renamed SB-135)	07/01/1998	soil	8 TO 10	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	5.0	6.0 U	11.0 U	2.0 U	6.0 U	5.0	2.0 U	14.0
(renamed SB-141)	09/02/1998	soil	8 TO 10	17.0 U	56.0	39.0 U	129.0	39.0 U	27.0 J	38.0	11.0 U	303.0	28.0 U	56.0 U	11.0 U	28.0 U	135.0	11.0 U	736.0
(renamed SB-184)	05/11/1999	soil	8 TO 10	3.0 U	307.0 D	23.3	66.4 D	36.0	11.9	81.5 D	53.9	551.0 D	110.0 D	10.0 U	2.0 U	5.0 U	294.0 D	2.0 U	1,950.8
	12/01/1998	soil	18 TO 20	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	8 U U	8.0 U	3.0 U	65.0	6.0 U	12.0 U	3.0 U	6.0 U	9.0	3.0 U	498.0
(renamed SB-129)	04/27/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	3.0 F	8.0 U	7 U U	7.0 U	2.0 U	16.0	6.0 U	12.0 U	2.0 U	6.0 U	10.0	2.0 U	41.0
(renamed SB-135)	07/01/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	3.0	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	43.0
(renamed SB-141)	09/02/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	8.0	6.0 U	12.0 U	2.0 U	6.0 U	2.0 J	2.0 U	40.0
(renamed SB-184)	05/11/1999	soil	18 TO 20	3.0 U	4.1	7.0 U	10.0	7.0 U	6.0 U	6.0 U	3.3	32.4	5.0 U	10.0 U	2.0 U	5.0 U	11.9	2.0 U	900.1
	12/01/1998	soil	28 TO 30	16.0 U	16 U	38.0 U	38.0 U	38.0 U	32 U U	32.0 U	11.0 U	9.0 FD	27.0 U	54.0 U	11.0 U	27.0 U	20.0 D	11.0 U	113.0
(renamed SB-129)	04/27/1998	soil	28 TO 30	3.0 U	3.0 U	7.0 U	7.0 F	3.0 F	6 U U	3.0 F	2 U U	17.0	5.0 U	11.0 U	2.0 U	5.0 U	7.0	2.0 U	46.0
(renamed SB-135)	07/01/1998	soil	28 TO 30	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	82.0
(renamed SB-141)	09/02/1998	soil	28 TO 30	3.0 U	3.0 U	2.0 J	7.0 U	6.0 J	2.0 J	2.0 J	2.0 U	12.0	5.0 U	11.0 U	2.0 U	5.0 U	2.0 U	2.0 U	57.0
(renamed SB-184)	05/11/1999	soil	28 TO 30	3.0 U	6.5	7.0 U	12.9	11.1	13.1	6.0 U	36.0	86.8	10.2	10.0 U	2.0 U	5.0 U	7.5	2.0 U	205.3
MW-120																			
	11/28/1997	soil	9 TO11	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7 U U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	15.0
(renamed SB-127)	04/27/1998	soil	8 TO 10	3.0 U	3.0 U	8.0 U	3.0 F	8.0 U	7 U U	7.0 U	2.0 U	5.0	6.0 U	11.0 U	2.0 U	6.0 U	2.0	2.0 U	27.0
(renamed SB-133)	07/01/1998	soil	8 TO 10	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0	50.0
(renamed SB-139)	09/02/1998	soil	8 TO 10	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	69.0
(renamed SB-182)	05/11/1999	soil	8 TO 10	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	2.0 U	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	16.6
	11/28/1997	soil	18 TO 19	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	8 U U	7.0 U	2.0 U	2.0 U	6.0 U	11.0 U	2.0 U	6.0 U	2.0 U	2.0 U	20.0
(renamed SB-127)	04/28/1998	soil	18 TO 20	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	7 U U	7.0 U	3.0 U	4.0	6.0 U	12.0 U	3.0 U	6.0 U	3.0	3.0 U	27.0
(renamed SB-133)	07/01/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	11.0 U	2.0 U	6.0 U	2.0 U	2.0 U	32.0
(renamed SB-139)	09/02/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	36.0
(renamed SB-182)	05/11/1999	soil	18 TO 20	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	2.0 U	6.0 U	2.0 U	2.0 U	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	58.8
	11/27/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	9.0 U	3.0 F	8.0	8.0 U	3.0 U	39.0	6.0 U	13.0 U	3.0 U	6.0 U	45.0	3.0 U	1,055.0
(renamed SB-127)	04/27/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	13.0	2.0 F	7 U U	7.0 U	2.0 U	19.0	6.0 U	12.0 U	2.0 U	6.0 U	24.0	2.0 F	126.0
(renamed SB-133)	07/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	1.0 F	9.0 U	8.0 U	8.0 U	3.0	4.0	6.0 U	13.0 U	3.0 U	6.0	5.0	3.0 U	62.0
(renamed SB-139)	09/02/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	2.0 J	9.0 U	1.0 J	8.0 U	3.0 U	3.0 U	6.0 U	12.0 U	3.0 U	6.0 U	2.0 J	3.0 U	89.0
(renamed SB-182)	05/11/1999	soil	28 TO 30	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	3.0	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2,057.0
	11/28/1998	soil	39 TO 40	4.0 U	4.0 U	8.0 U	9.0 U	9.0 U	7 U U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	32.0
MW-121																			
	11/28/1997	soil	8 TO 10	4.0 U	4.0 U	7,620.0 D	21,088.0 D	202.0	2,142.0 D	8.0 U	6,559.0 D	31,923.0 ED	6.0 U	13.0 U	3.0 U	6.0 U	7,744.0 D	7.0	95,367.0
(renamed SB-128)	04/27/1998	soil	8 TO 10	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	1.0 F	2.0 U	18.0
(renamed SB-134)	07/01/1998	soil	8 TO 10	457.0 U	11,593.0	1,067.0 U	25,659.0	2,994.0	915.0 U	8,915.0	9,765.0	52,088.0 D	8,529.0	1,524.0 U	305.0 U	762.0 U	6,928.0	305.0 U	154,177.0
(renamed SB-140)	09/02/1998	soil	8 TO 10	17.0 U	79.0	41.0 U	202.0	17.0 J	29.0 J	54.0	105.0	787.0	29.0 U	58.0 U	12.0 U	29.0 U	142.0	12.0 U	1,579.0
(renamed SB-183)	05/11/1999	soil	8 TO 10	15.0 U	3,630.0 D	252.0	8,300.0 D	457.0 E	9,990.0 D	478.0 E	9,680.0 D	63,800.0 D	363.0	362.0	305.0	25.0 U	3,270.0	10.0 U	227,543.5
	11/28/1997	soil	18 TO 20	3.0 U	4.0 U	8.0 U	254.0 E	8.0 U	7.0 U	7.0 U	2.0 U	138.0	6.0 U	12.0 U	2.0 U	6.0 U	216.0	2.0 U	12,554.0
(renamed SB-128)	04/27/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	11.0
(renamed SB-134)	07/01/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	100.0	8.0 U	7.0 U	32.0	32.0	211.0	6.0 U	12.0 U	2.0 U	6.0 U	149.0	2.0 U	690.0
(renamed SB-140)	09/02/1998	soil	18 TO 20	17.0 U	150.0	41.0 U	379.0	40.0 J	35.0 U	107.0	12.0 U	135.0	29.0 U	58.0 U	12.0 U	29.0 U	251.0	12.0 U	1,344.0
(renamed SB-183)	05/11/1999	soil	18 TO 20	3.0 U	320.0 D	7.0 U	766.0 D	9.8	17.8	12.0	103.0 D	481.0	11.9	10.0 U	4.0	5.0 U	356.0 D	2.0 U	6,306.6
	11/28/1997	soil	28 TO 30	4.0 U	4.0 U	9.0 U	63.0	6.0 F	11.0	8.0 U	20.0	56.0	6 U U	13.0 U	1.0 F	6.0 U	56.0	3.0	5,836.0
(renamed SB-134)	07/01/1998	soil	28 TO 30	493.0 U	1,910.0	1,151.0 U	4,431.0	1,151.0 U	987.0	1,564.0	753.0	329.0 U	822.0 U	1,645.0 U	329.0 U	822.0 U	2,013.0	329.0 U	37,091.0
(renamed SB-140)	09/02/1998	soil	28 TO 30	4.0 U	65.0	9.0 U	126.0	12.0	8.0 U	32.0	3.0 U	67.0	6.0 U	13.0 U	3.0 U	6.0 U	75.0	3.0 U	2,438.0
(renamed SB-183)	05/11/1999	soil	28 TO 30	3.0 U	18.7	7.0 U	47.7	7.0 U	6.0 U	6.0 U	13.6	58.4	5.7	10.0 U	2.0 U	5.0 U	35.4	2.0 U	2,457.3

KELLY AIR FORCE BASE
VOC SOIL RESULTS

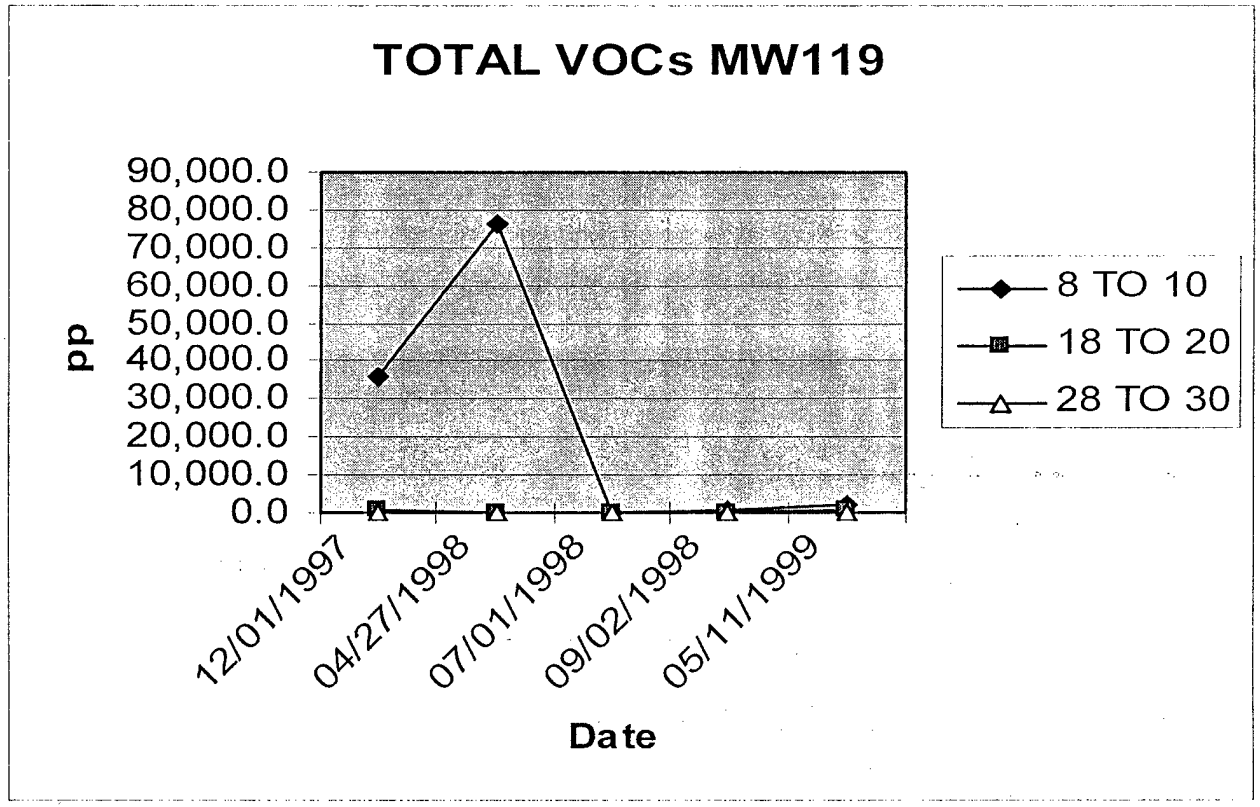
Sample ID:	Date Analyzed:	Matrix Soil or Water	Depth	4-Chloro-toluene	1,3,5-Tri-methyl-benzene	Tert-butyl benzene	1,2,4-Tri-methyl-benzene	Sec-butyl benzene	1,3-Di-chloro-benzene	4-Isopropyl-toluene	1,4-Di-chloro-benzene	1,2-Di-chloro-benzene	n-Butyl-benzene	1,2-Di-bromo-3-chloropropar	1,2,4-Tri-chloro-benzene	Hexa-chloro-butadiene	Naphtha-lene	1,2,3-Tri-chloro-benzene	Total VOCS
MW-122																			
	12/01/1997	soil	8 TO 10	17.0 U	17 U	39.0 U	39.0 U	39.0 U	19 FD	34.0 U	38.0 D	313.0 D	28.0 U	56.0 U	6.0 FD	28.0 U	42.0 D	8.0 FD	531.0
(renamed SB-125)	04/27/1998	soil	8 TO 10	18.0 U	98.0 D	41.0 U	274.0 D	22.0 FD	406.0 D	13.0 FD	723.0 D	7,021.0	29.0 U	59.0 U	21.0 D	29.0 U	100.0 D	12.0 U	9,405.0
(renamed SB-131)	07/01/1998	soil	8 TO 10	417.0 U	417.0 U	972.0 U	972.0 U	972.0 U	193.0 F	833.0 U	278.0 U	1,853.0	694.0 U	1,389.0 U	278.0 U	694.0 U	278.0 U	278.0 U	2,435.0
(renamed SB-137)	09/01/1998	soil	8 TO 10	17.0 U	17.0 U	40.0 U	40.0 U	40.0 U	20.0 J	35.0 U	12.0 U	315.0	29.0 U	58.0 U	12.0 U	29.0 U	14.0	12.0 U	372.0
(renamed SB-180)	05/11/1999	soil	8 TO 10	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	14.7	6.0 U	32.8	295.0 D	5.0 U	10.0 U	3.6	5.0 U	9.1	2.0 U	364.4
	12/01/1997	soil	18 TO 20	18.0 U	18 U	41.0 U	41.0 U	41.0 U	31 FD	35.0 U	58.0 D	421.0 D	29.0 U	59.0 U	12.0 U	29.0 U	46.0 D	12.0 U	1,528.0
(renamed SB-125)	04/27/1998	soil	18 TO 20	23.0 U	23.0 U	53.0 U	13.0 FD	53.0 U	47.0 D	46.0 U	86.0 D	687.0 D	38 U U	76.0 U	15.0 U	38.0 U	22.0 D	15.0 U	1,503.0
(renamed SB-131)	07/01/1998	soil	18 TO 20	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	3.0 F	8.0 U	6.0	54.0	6.0 U	13.0 U	3.0 U	6.0 U	3.0 U	3.0 U	137.0
(renamed SB-137)	09/01/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	3.0 J	9.0 U	2.0 U	64.0	6.0 U	12.0 U	2.0 U	6.0 U	2.0 J	2.0 U	120.0
(renamed SB-180)	05/11/1999	soil	18 TO 20	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	8.4	6.0 U	20.2	167.0	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	283.0
	12/01/1997	soil	28 TO 30	4.0 U	4.0 U	9 U U	9.0 U	9.0 U	8.0 U	8.0 U	3 U U	3.0	6.0 U	12.0 U	3.0 U	6.0 U	3.0 U	3.0 U	33.0
(renamed SB-125)	04/27/1998	soil	28 TO 30	20.0 U	125.0 D	47.0 U	299.0 D	29.0 FD	290.0 D	41.0 U	506.0 D	4,593.0	34.0 U	68.0 U	31.0 D	34.0 U	93.0 D	14.0 U	8,215.0
(renamed SB-131)	07/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	12.0	3.0 F	2.0 F	8.0 U	3.0 U	8.0	7.0 U	13.0 U	3.0 U	7.0 U	2.0 F	3.0 U	66.0
(renamed SB-137)	09/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	2.0 J	8.0 U	3.0 U	22.0	6.0 U	12.0 U	3.0 U	6.0 U	3.0 U	3.0 U	130.0
(renamed SB-180)	05/11/1999	soil	28 TO 30	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.7	12.1	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	89.0
MW-124																			
	12/01/1997	soil	8 TO 10	17.0 U	17 U	41.0 U	41.0 U	41 U U	35 U	35.0 U	12.0 U	16.0 D	29.0 U	58.0 U	12.0 U	29.0 U	26.0 D	12.0 U	132.0
(renamed SB-126)	04/27/1998	soil	8 TO 10	17.0 U	17.0 U	40.0 U	11.0 FD	40 U U	35.0 U	35.0 U	12.0 U	49.0 U	29.0 U	58.0 U	12.0 U	29.0 U	27.0 D	12.0 U	575.0
(renamed SB-132)	07/01/1998	soil	8 TO 10	18.0 U	18.0 U	43.0 U	43.0 U	43.0 U	37.0 U	37.0 U	12.0 U	12.0 U	31.0 U	61.0 U	12.0 U	31.0 U	7.0 FD	12.0 U	568.0
(renamed SB-138)	09/01/1998	soil	8 TO 10	4.0 U	4.0 U	8.0 U	5.0 J	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	14.0
(renamed SB-181)	05/11/1999	soil	8 TO 10	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	6.2	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	6.2
	12/01/1997	soil	18 TO 20	4.0 U	4.0 U	8.0 U	8.0 U	8 U U	7 U U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	4.0	2.0 U	31.0
(renamed SB-126)	04/27/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8 U U	7.0 U	7.0 U	2 U U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	1.0 F	1.0 F	10.0
(renamed SB-132)	07/01/1998	soil	18 TO 20	4.0 U	4.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	12.0 U	2.0 U	6.0 U	2.0 U	2.0 U	3.0
(renamed SB-138)	09/01/1998	soil	18 TO 20	3.0 U	3.0 U	8.0 U	8.0 U	8.0 U	7.0 U	7.0 U	2.0 U	2.0 U	6.0 U	11.0 U	2.0 U	6.0 U	2.0 U	2.0 U	0.0
(renamed SB-181)	05/11/1999	soil	18 TO 20	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	2.0 U	5.6	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	25.5
	12/01/1997	soil	28 TO 30	17.0 U	17 U	41.0 U	41.0 U	41 U U	58.0 D	35 U	214.0 D	599.0 D	29.0 U	58.0 U	12.0 U	29.0 U	91.0 D	2.0 U	1,466.0
(renamed SB-126)	04/27/1998	soil	28 TO 30	17.0 U	17.0 U	40.0 U	279.0 D	118.0 D	190.0 D	34.0 U	376.0 D	3,811.0	28.0 U	57.0 U	11.0 U	28.0 U	117.0 D	11.0 U	5,416.0
(renamed SB-132)	07/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	9.0 U	9.0 U	8.0 U	8.0 U	3.0 U	3.0 U	6.0 U	13.0 U	3.0 U	6.0 U	3.0 U	3.0 U	59.0
(renamed SB-138)	09/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	1.0 J	1.0 J	3.0 J	8.0 U	3.0 U	47.0	6.0 U	13.0 U	3.0 U	6.0 U	2.0 J	3.0 U	812.0
(renamed SB-181)	05/11/1999	soil	28 TO 30	3.0 U	3.0 U	7.0 U	7.0 U	7.0 U	6.0 U	6.0 U	3.0	5.9	5.0 U	10.0 U	2.0 U	5.0 U	2.0 U	2.0 U	35.7
SB-118																			
	11/28/1997	soil	8 TO 10	4.0 U	4.0 U	9.0 U	5,770.0 D	9 U U	55.0	7.0 U	164.0	3,411.0 D	6.0 U	12.0 U	3.0 U	6.0 U	3,536.0 D	3.0 U	20,186.0
	11/28/1997	soil	18 TO 20	17.0 U	17 U	41.0 U	41.0 U	41 U U	35 U	35.0 U	12.0 U	31.0 D	29.0 U	58.0 U	12.0 U	29.0 U	39.0 D	12.0 U	522.0
	12/01/1998	soil	28 TO 30	4.0 U	4.0 U	9.0 U	9.0 U	9 U U	4.0 F	8.0 U	15.0	70.0	6.0 U	13.0 U	3.0 U	6.0 U	17.0	3.0 U	1,202.0

Notes:
U - The analyte was analyzed for but not detected. The associated numeric value is at or below the MDL.
D - The compound was found in an analysis at at a secondary dilution factor.
F - The analyte was positively identified but the associted numerical value is below the reporting limit.
E - Concentration exceeded the calibration range of the instrument.
B- The analyte was found in the associted blank, as well as in the sample.
! - Value was obtained from a 1:25,000 dilution
,& - Value was obtained from a 1:1000 dilution.
* - all results are in mg/l
NA - The analyte was not analyzed for this compound.

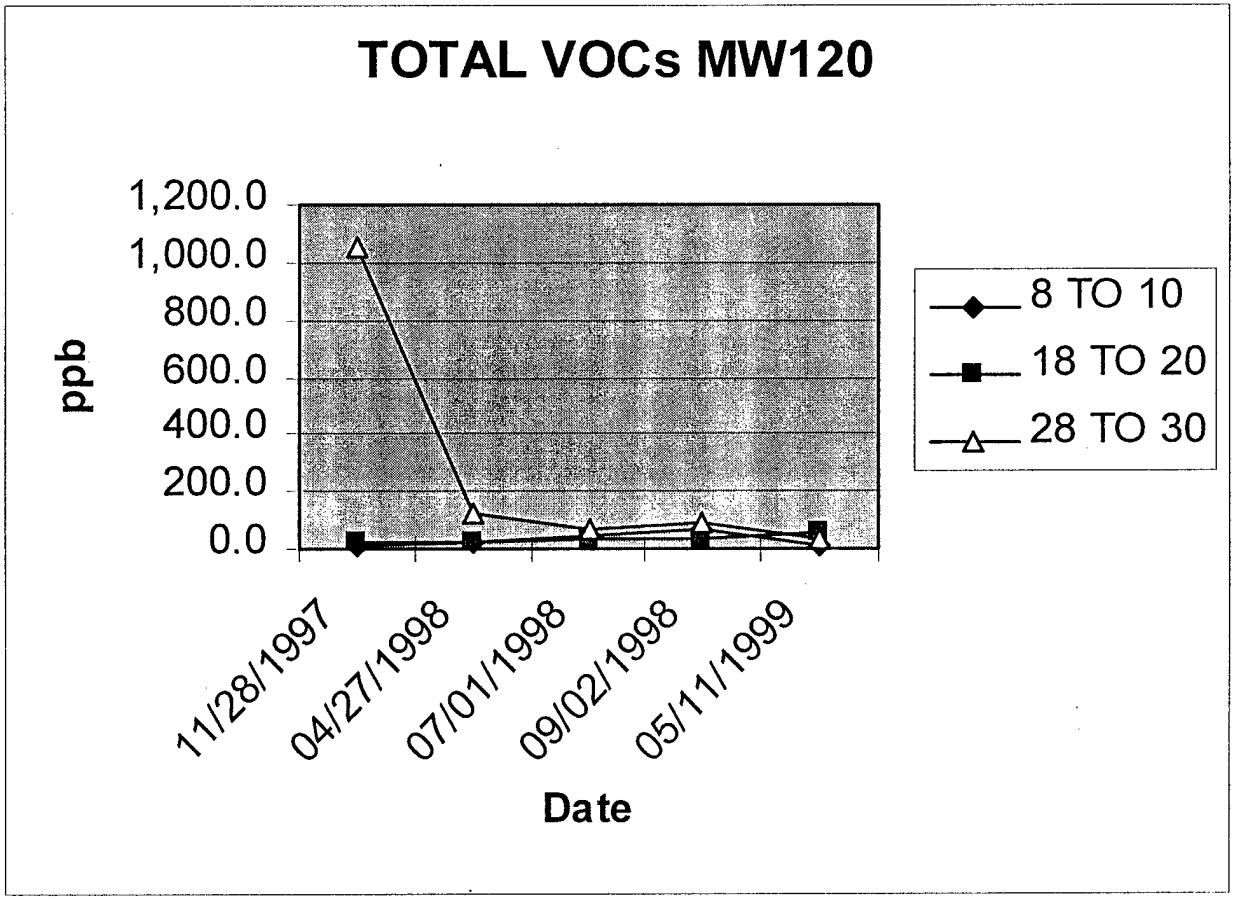
MW-007 TOTAL VOCS SOIL



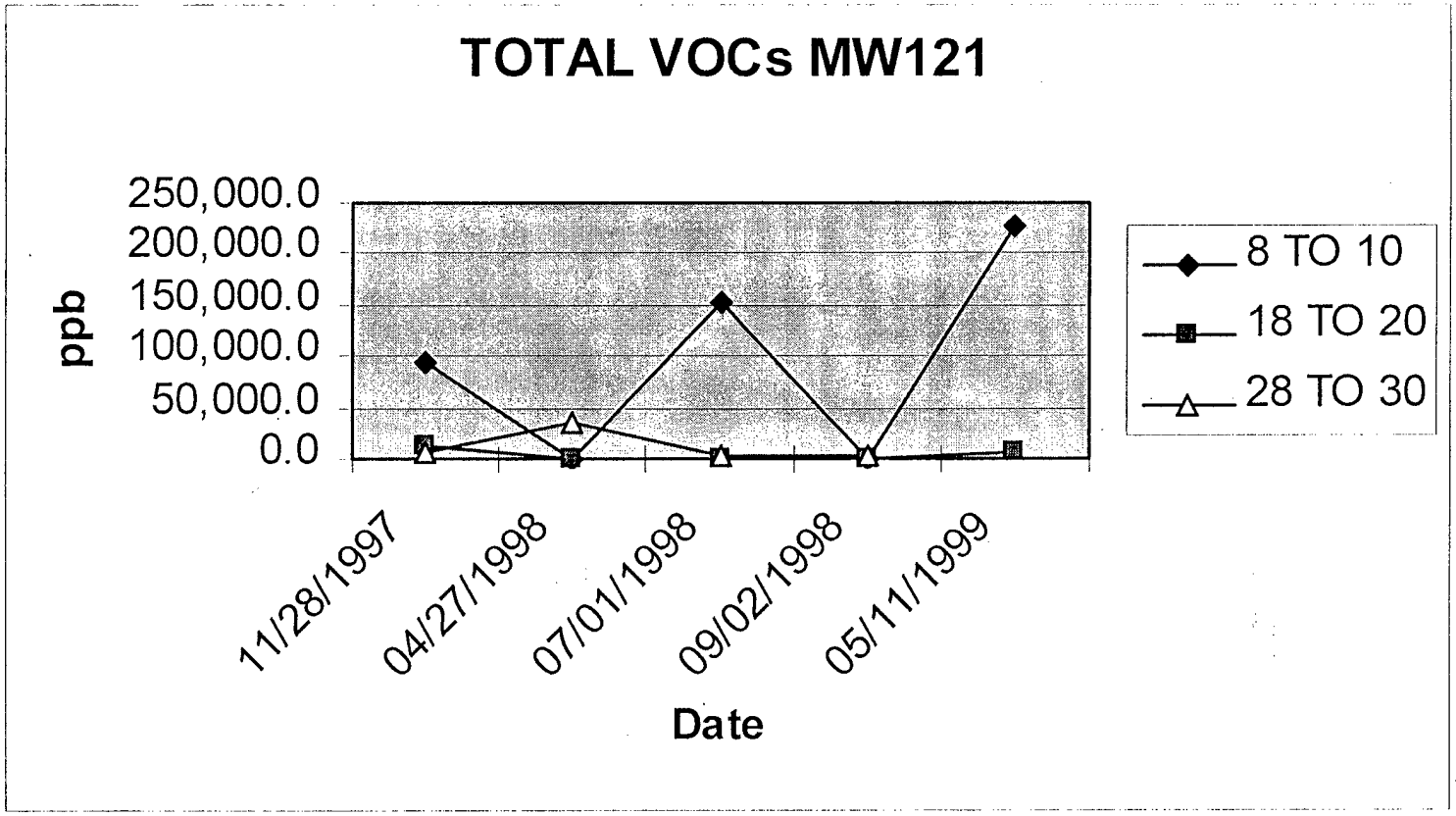
MW-119 TOTAL VOCS SOIL



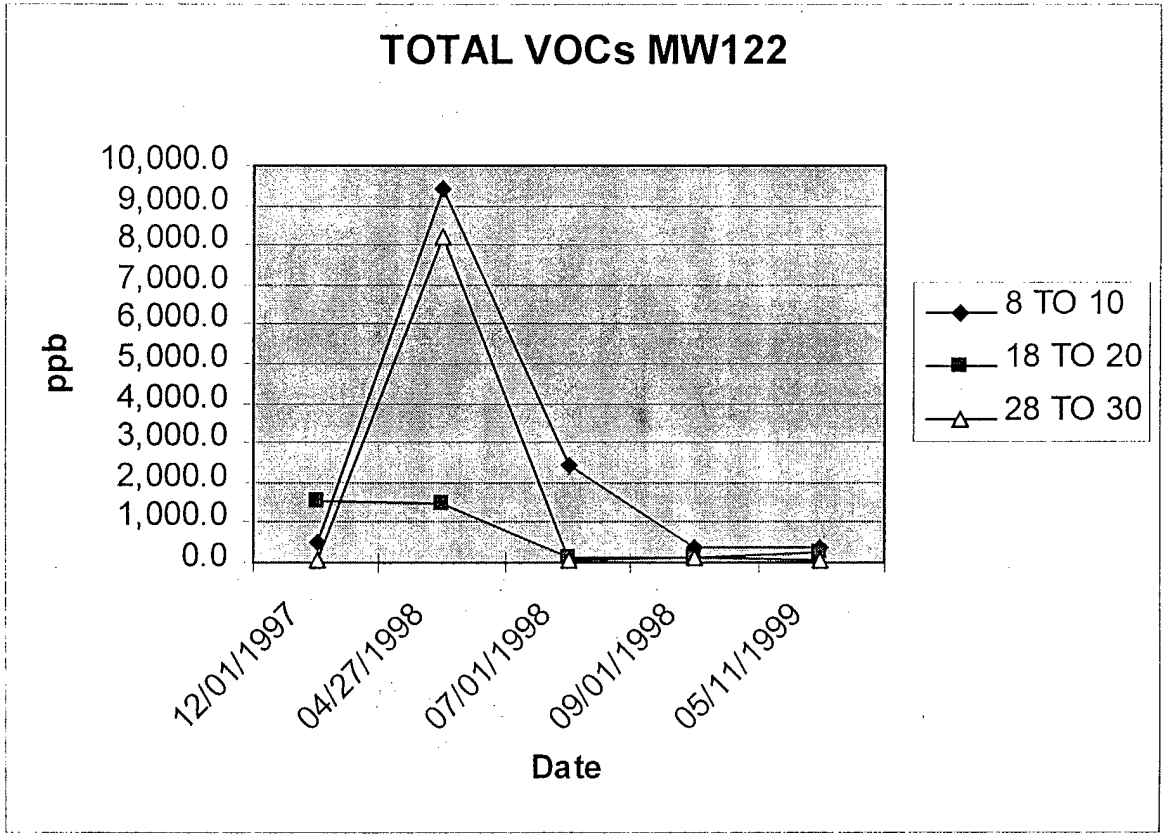
MW-120 TOTAL VOCS SOIL



MW-121 TOTAL VOCS SOIL



MW-122 TOTAL VOCS SOIL



MW-124 TOTAL VOCS SOIL